0071945

131282

100/300 AREA UNIT MANAGERS MEETING
APPROVAL OF MINUTES
November 9, 2006

APPROVAL: _____ Date 12/14/06
Kevin D. Bazzell, DOE (A3-04)
River Corridor Project Manager

APPROVAL: _____ Date 12/14/06
Briant Charboneau, DOE (A6-33)
Groundwater Project Manager

APPROVAL: _____ Date 12/14/2006
John Price or Rick Bond, Ecology (H0-57)
Environmental Restoration Manager

APPROVAL: _____ Date 12/14/06
Larry Gadbois, EPA (B1-46)
100 Aggregate Area Unit Manager

APPROVAL: Alicia Boyd Date 12/14/2006
Alicia Boyd, EPA (B1-46)
300 Aggregate Area Unit Manager

100 & 300 AREA UNIT MANAGER MEETING MINUTES

Groundwater, Source Operable Units, Facility (D4 and ISS), and End States and Final Closure

November 9, 2006

Washington Closure Hanford Building, 2620 Fermi Drive, Richland, Washington

ADMINISTRATIVE

- Next Unit Manager Meeting (UMM) - The next meeting will be held December 14, 2006 at Washington Closure Hanford (WCH) Office Building, 2620 Fermi Avenue, Room A110.
- Quorum - A quorum of Tri-Party project managers was present to conduct the business of the Unit Managers Meeting.
- Attendees/Delegations - Attachment A is the list of attendees. Attachment B documents the delegations of the U.S. Department of Energy River Corridor Project Manager (Kevin Bazzell) to Rudy Guercia, the U. S. Department of Energy Groundwater Project Manager (Briant Charboneau) to John G. Morse, and the U.S. Environmental Protection Agency 100 Area Aggregate Area Unit Manager (Larry Gadbois) to Rod Lobos; no other delegations were received.
- Approval of Minutes - The approval and signing of the October 12, 2006 meeting minutes were approved by the U.S. Environmental Protection Agency (EPA), Washington State Department of Ecology (Ecology), and U.S. Department of Energy, Richland Operations Office (RL).
- Action Item Status - Status of action items was covered and updated (Attachment C).
    - Agreement 1: Attachment 1 documents an agreement from EPA and Ecology regarding tritium soil cleanup levels in the 100 Area Burial Grounds Remedial Action Sampling and Analysis Plan, DOE/RL-2001-35, Rev. 0. Closes out Action Item 100-004.
    - Agreement 2: Ecology agrees to allow RL to submit an annual report for the 100-HR-3 ISRM system versus a quarterly report, and RL shall continue to submit monthly data to Ecology. Closes out Action Item 100-113.
    - Agreement 3: Attachment 2 documents the schedule for the EM-22 Treatability Test Report. Closes out Action Item 100-114. Attachment 2 also documents the plans/actions for the 182-D Reservoir and closes out Action Item 100-115.
    - Agreement 4: Attachment 3 documents Ecology approval to modify the re-vegetation approach at 1301-N (116-N-1). Closes out Action Item 100-117.
- Agenda: Attachment D is an agenda for the meeting.

EXECUTIVE SESSION (Tri-Parties Only)

This portion of the meeting was cancelled.

100 AREA GROUNDWATER

Attachment 4 provides a status or information. No issues were identified, and no agreements were documented.

Action 1: RL (John Morse) will set up a meeting with Ecology (John Price) on overall long-term picture for 100-HR-3.

Action 2: RL (John Morse) will provide Ecology (Mandy Jones) with the 100-D well installation, as well as the EM-22 Treatability Test well installation plans.

Action 3: RL (John Morse) will provide EPA (Rod Lobos) with the Contaminates of Concern (COCs) plot for each well in 100-FR-3, including a list of wells sampled in October 2006 and those scheduled to be sampled in November 2006.

300 AREA GROUNDWATER

Attachment 4 provides a status or information. No issues were identified, no agreements were documented, and no action items were documented.

GROUNDWATER/SOURCE OPERABLE UNIT INTEGRATION

No issues were identified, no agreements were documented, and no action items were documented.

100 AREA FIELD REMEDIATION CLOSURE

Attachments 5, 6, 7, 8, and 9 provide a status or information for various projects in the 100 Area field remediation project. Attachment 5 covers sampling and design. Attachment 6 covers 100-B/C. Attachment 7 covers 118-K-1. Attachment 8 covers 100-D. Attachment 9 covers 100-N. No issues were identified.

Agreement 1: Attachment 6 documents approval from EPA on the backfill concurrence for waste sites 100-B-14:1, 100-B-14:2, and 1607-B2:2 from EPA at the 100-B/C Area.

Agreement 2: Attachment 8 documents an agreement from Ecology to relocate an upwind air monitor at 100-D Area to the other side of the road where the current power supply is located. The agreement also requires that the air monitor (i.e., dog house) be located at least two building heights away to reduce the air turbulence interference caused by the building.

Action 1: RL (Jamie Zeisloft) will set up a meeting with Ecology on the holistic 100-D characterization approach.

Action 2: RL (Jamie Zeisloft) will provide Ecology (Mandy Jones) with the overall 100-D project remediation schedule.

300 AREA FIELD REMEDIATION CLOSURE

Attachment 10 provides a status or information. No issues were identified, and no agreements were documented.

Action: RL (Chris Smith) will set up a meeting with EPA to discuss the M-16-67 milestone for 618-10/11 to ensure there are no issues with the design solution work and completing the milestone.

END STATES AND FINAL CLOSURE PROJECT

Attachment 11 provides a status or information. No issues were identified, no agreements were documented, and no actions were documented.

DEACTIVATION, DECONTAMINATION, DECOMMISSION, DEMOLITION (D4)

Attachment 12 provides a status or information. No issues were identified, and no actions were documented.

Agreement: Attachment 13 documents an agreement from EPA on the disposition of fluorescent lamps and ballasts for 300 Area demolition facilities.

INTERIM SAFE STORAGE (ISS)

No issues were identified, no agreements were documented, and no actions were documented.

SPECIAL TOPICS

No special topics were discussed.

Attachment A

100/300 AREA UNIT MANAGER MEETING
ATTENDANCE AND DISTRIBUTION
November 9, 2006

NAME	E-MAIL ADDRESS	MSIN	COMP	SIGNATURE
Isom, Debbi	Original +1 copy	H6-08	ADREC	N/A
Bazzell, Kevin D	Kevin_D_Bazzell@rl.gov	A3-04	DOE	
Chalk, Steven E	Steven_E_Chalk@rl.gov	A7-75	DOE	
Charboneau, Briant L	Briant_L_Charboneau@rl.gov	A6-33	DOE	
Clark, Clifford E	Clifford_E_Cliff_Clark@rl.gov	A5-15	DOE	
Guercia, Rudolph F	Rudolph_F_Rudy_Guercia@rl.gov	A3-04	DOE	
Hansen, James P	James_P_ Hanson@rl.gov	A5-13	DOE	
Hildebrand, R Doug	R_D_Doug_Hildebrand@rl.gov	A6-38	DOE	
Johnson, Vernon G	Vernon_G_Johnson@rl.gov	N/A	DOE	
Morse, John G	John_G_Morse@rl.gov	A6-11	DOE	
Romine, Larry D	Larry_D_Romine@rl.gov	A6-33	DOE	
Sands, John P	John_P_Sands@rl.gov	A3-04	DOE	
Smith, Chris	Douglas_C_Chris_Smith@rl.gov	A3-04	DOE	
Thompson, Mike	K_M_Mike_Thompson@rl.gov	A6-38	DOE	
Tortoso, Arlene C	Arlene_C_Tortoso@rl.gov	A6-38	DOE	
Westover, Kent R	Kent_R_Westover@rl.gov	A3-04	DOE	
Zeisloft, Jamie	Jamie_Zeisloft@rl.gov	A3-04	DOE	
Ayres, Jeffrey M	JAYR461@ECY.WA.GOV	H0-57	ECO	
Bond, Fredrick W	FBON461@ECY.WA.GOV	H0-57	ECO	
Cusack, Laura J	LCUS461@ECY.WA.GOV	H0-57	ECO	
Goswami, Dib	DGOS461@ECY.WA.GOV	H0-57	ECO	
Huckaby, Alisa D	AHUC461@ECY.WA.GOV	H0-57	ECO	
Jones, Mandy	MJON461@ECY.WA.GOV	H0-57	ECO	
Price, John	JPRI461@ECY.WA.GOV	H0-57	ECO	
Rochette, Elizabeth	BROC461@ECY.WA.GOV	H0-57	ECO	
Shea, Jacqueline	JASH461@ECY.WA.GOV	H0-57	ECO	
Skinnarland, Ron R	RSKI461@ECY.WA.GOV	H0-57	ECO	
Smith-Jackson, Noe'l	NSMI461@ECY.WA.GOV	H0-57	ECO	
Vanni, Jean	Jvan461@ECY.WA.GOV	H0-57	ECO	
Whalen, Cheryl	CWHA461@ECY.WA.GOV	H0-57	ECO	
Boyd, Alicia	BOYD.ALICIA@EPA.GOV	B1-46	EPA	

Faulk, Dennis A	FAULK.DENNIS@EPA.GOV	B1-46	EPA	
Gadbois, Larry E	GADBOIS.LARRY@EPA.GOV	B1-46	EPA	
Lobos, Rod	LOBOS.ROD@EPA.GOV	B1-46	EPA	
Borghese, Jane V	Jane_V_Borghese@rl.gov	E6-35	FH	
Jackson, Ron	Ronald_L_Jackson@rl.gov	E6-35	FH	
Piippo, Rob	Robert_E_Piippo@rl.gov	H8-12	FH	
Fabre, Russel J	Russel_J_Fabre@rl.gov	E6-35	FH	
Fruchter, Jonathan S	john.fruchter@pnl.gov	K6-96	PNNL	
Hartman, Mary J	mary.hartman@pnl.gov	K6-96	PNNL	
Luttrell, Stuart P		K6-96	PNNL	
Peterson, Robert E	robert.peterson@pnl.gov	K6-75	PNNL	
Cimon, Shelly	scimon@oregontrail.net		TRIBES	
Lilligren, Sandra	sandral@nezperce.org		TRIBES	
Buckmaster, Mark A	mark.buckmaster@wch-rcc.com	X9-07	WCH	
~~Butler, Dru H~~	~~dru.butler@wch-rcc.com~~	~~H0-19~~	~~WCH~~	
Callison, Stacey W	stacey.callison@wch-rcc.com	X9-07	WCH	
Carlson, Richard A	richard.carlson@wch-rcc.com	X4-08	WCH	
Clapper, Nicholas	Nicholas.clapper@wch-rcc.com	X3-16	WCH	
Clark, Steven W	steven.clark@wch-rcc.com	H9-01	WCH	
~~Cook, Kelly E~~	~~kelly.cook@wch-rcc.com~~	~~X4-08~~	WCH	
Corpuz, Franklin M	franklin.corpuz@wch-rcc.com	L6-06	WCH	
Darby, John W	john.darby@wch-rcc.com	L6-06	WCH	
DeLozier, Mary P (Fran)	fran.delozier@wch-rcc.com	H0-34	WCH	
Dieterle, Steven E	steven.dieterle@wch-rcc.com	L1-04	WCH	
Dietz, Linda A	linda.dietz@wch-rcc.com	H0-23	WCH	
Dittmer, Lorna M	lorna.dittmer@wch-rcc.com	H9-02	WCH	
Donnelly, Jack W	jack.donnelly@wch-rcc.com	X4-08	WCH	
Fancher, Jonathan D (Jon)	jon.fancher@wch-rcc.com	X9-08	WCH	
Gano, Kenneth A (Ken)	kenneth.gano@wch-rcc.com	H9-03	WCH	
Golden, James W	james.golden@wch-rcc.com	L1-04	WCH	
Hadley, Karl A	karl.hadley@wch-rcc.com	~~X9-85~~	WCH	
Hedel, Charles W	charles.hedel@wch-rcc.com	H0-23	WCH	
Hulstrom, Larry C	larry.hulstrom@wch-rcc.com	H0-23	WCH	
Killoy, Steve	Steve.Killoy@wch-rcc.com	X0-18	WCH	
Koegler, Kim J	kim.koegler@wch-rcc.com	L1-07	WCH	
Landon, Roger J	roger.landon@wch-rcc.com	H9-03	WCH	

LaRue, Deena N	deena.larue@wch-rcc.com	H0-20	WCH	
Lerch, Jeffrey A	jeffrey.lerch@wch-rcc.com	H0-23	WCH	[illegible]
Ludowise, John D	john.ludowise@wch-rcc.com	X4-08	WCH	
Miller, Larry R (Rex)	rex.miller@wch-rcc.com	X3-40	WCH	
Obenauer, Dale F	dale.obenauer@wch-rcc.com	X3-16	WCH	Dale Obenauer
~~Ollero, Jennifer F~~	~~jennifer.ollero@wch-rcc.com~~	~~H0-19~~	~~WCH~~	
Ovink, Roger W	roger.ovink@wch-rcc.com	H9-01	WCH	
Parnell, Scott E	scott.parnell@wch-rcc.com	L1-09	WCH	[illegible]
Smet, Ann K (Annie)	annie.smet@wch-rcc.com	X4-08	WCH	
Strom, Dean N	dean.strom@wch-rcc.com	X3-40	WCH	[illegible]
Swartz, Joseph M (Mike)	mike.swartz@wch-rcc.com	L1-07	WCH	
Thomson, Jill E	jill.thomson@wch-rcc.com	H0-23	WCH	
Weiss, Stephen G	stephen.weiss@wch-rcc.com	H0-23	WCH	
Yasek, Donna M	donna.yasek@wch-rcc.com	L1-07	WCH	Donna Yasek
Winterholder, John		E6-35	FH	[illegible]
Vanni Jeccu		H0-57	ECO	[illegible]
Lloyd Earl	earl_r_lloyd@rl.gov	R3-60	FH	[illegible]
Jones, Mandy	mjon461@ecy.wa.gov	H0-57	WDOE	[illegible]
Smith, Chris	douglas_c_chris_smith@rl.gov	A3-04	DOE-RL	[illegible]
Simon Shelley ~~[illegible]~~	scimone@oregontrail.net			[illegible]

Attachment B

Donnelly, Jack W

From: Gadbois.Larry@epamail.epa.gov
Sent: Monday, November 06, 2006 9:33 AM
To: Jack.Donnelly@wch-rcc.com; jpri461@ecy.wa.gov; Kevin_D_Bazzell@RL.gov; Douglas_C_Chris_Smith@RL.gov; jamie_zeisloft@RL.gov; arlene_c_tortoso@RL.gov; John_G_Morse@RL.gov
Cc: Faulk.Dennis@epamail.epa.gov; Lobos.Rod@epamail.epa.gov; Boyd.Alicia@epamail.epa.gov
Subject: EPA 100 Area designee for Nov 9th UMM

I designate Rod Lobos to fulfill EPA's responsiblities under the TPA for the 100 Area portion of the UMM on Nov 9th.

Donnelly, Jack W

From: Morse, John G [John_G_Morse@RL.gov]
Sent: Tuesday, November 07, 2006 10:37 AM
To: Donnelly, Jack W
Subject: FW: Acting Groundwater Remediation Project Director

FYI

From: Charboneau, Briant L
Sent: Friday, November 03, 2006 6:23 PM
To: McCormick, Matthew S; Holten, Richard A
Cc: Lutz, Karen; French, Colleen C; Ford, Bruce H; Fletcher, Thomas W; Foley, Bryan L; Hale, Terri Y; Hanson, James P; Hildebrand, R D (Doug); Leary, Kevin D; Morse, John G; Roddy, Francis M; Chalk, Steven E; Thompson, K M (Mike); Tortoso, Arlene C
Subject: Acting Groundwater Remediation Project Director

I will be out of the office until November 16, 2006. John Morse will be the acting Groundwater Remediation Project Director until I return.

Donnelly, Jack W

From: Bazzell, Kevin D [Kevin_D_Bazzell@RL.gov]
Sent: Monday, November 06, 2006 1:01 PM
To: Gadbois.Larry@epamail.epa.gov; Jack.Donnelly@wch-rcc.com; Price, John (ECY); Smith, Douglas C (Chris); Zeisloft, Jamie; Morse, John G; Boyd.Alicia@epamail.epa.gov; Lobos.Rod@epamail.epa.gov; Faulk.Dennis@epamail.epa.gov; Guercia, Rudolph F (Rudy); Westover, Kent R; Sands, John P; Charboneau, Briant L; Bond, Rick
Subject: Nov 9th UMM designee

I will not be available to attend the November 9th 100/300 Area UMM. In accordance with the allowances of TPA Action Plan, Section 4.1, I delegate my River Corridor Closure Project(RCCP) authority and responsibilities to Rudy Guercia.

Thanks,

Kevin

Attachment C

100/300 Area UMM
Action List

Open (O)/Closed (X	Action No.	Co.	Actionee	Project	Action Description	Status
O	100-003	RL	K. Bazzell	Field Remediation Closure	EPA and Ecology request DOE prepare a schedule for cleanup of the 200-CW-3 waste sites listed in the 100 Area Remaining Site Record of Decision.	Open: 7/13/06; Action: Status was provided but additional detail on schedule is needed.
X	100-004	WC	L. Dittmer	Sample Design and Cleanup Verification	Present an errata sheet to provide consistent tritium cleanup levels between the 100 Area Burial Ground SAP and the 100 Area SAP.	Open: 7/31/06; Action: Closed 11/9/2006.
X	100-005	RL	K. Bazzell	General RCCC	EPA and Ecology request a meeting with the DOE person who can approve/disapprove language in the 100 Area Remedial Design Report. (Action associated with a proposed revision to the RDR to include descriptive language on ecorisk screening.)	Open: 7/13/06; Action: Closed 11/9/2006.
O	100-005B	EPA	L. Gadbois	General RCCC	Revise the 100 Area RDR to include more specific language on the methodology and process for conducting ecological risk screening during closeout process.	Open: 9/14/06; Action: Agreement to be sought at 12/14/2006 UMM.
X	100-006	RL	J. Zeisloft	100-K Field Remediation	RL to provide EPA and Ecology a copy of the NorthWind Characterization Report for 118-K-1.	Open: 7/13/06; Action: Completed 10/26/06
X	100-007	RL	J. Zeisloft	100-K Field Remediation	RL provide EPA and Ecology the status of the AMEC Report on 118-K-1.	Open: 7/13/06; Closed: 8/10/06 Action did not occur
X	100-008	RL	K. Bazzell	Field Remediation	Provide WCH direction to evaluate other, existing, options for handling bottles containing liquids that are unearthed during remedial actions. Evaluate what is being done at other sites (Brookhaven; Sandia; DOE Lessons Learned website); evaluate how HAZM	Open: 9/14/06; Action: Competed 10/2/06

100/300 Area UMM
Action List

	Action No.	Co.	Actionee	Project	Action Description	Status
X	100-009	RL	R. Guercia	100-K D4	Send a copy of a building completion report (a quarterly report prepared to satisfy the DOE Order to take a facility "off the books.") as an alternate format of retrievable documentation.	Open: 9/14/06; Action: Complete 9/15/06
X	300-002	PN	B. Peterson M. Hartman	300-FF-5 Groundwater	Invite Jacqui Shea (Ecology), Alica Huckaby (Ecology), Alicia Boyd (EPA) to the September 300 Area aquifer tube sampling event.	Open: 7/13/06; Action: Completed 9/5/06
X	100-110	ECY	J. Price	100-H	John Price (Ecology) will send Kent Westover (RL) an email afte looking at the information on the 116-H-4 table provided at the 10/12/06 UMM.	Open: 10/12/06; Action: Completed 10/13/06
O	100-111	RL	K. Westover	RCC General	RL shall propose a process for resolving sampling approaches where Ecology and RL differ, and multiple attempts at a technical level are exchanged without resolution.	Open: 10/12/06; Action: RL is drafting a process.
O	100-112	RL	B. Charboneau	100-HR-3	RL will respond to Ecology's email request on the data and analysis request regarding the 100-HR-3 system.	Open: 10/12/06; Action: Meeting will be scheduled in next week.
X	100-113	ECY	J. Price	100-HR-3	John Price will respond to RL's request to submit an annual report for the ISRM system versus a quarterly report. However, monthly data will still be sent to Ecology.	Open: 10/12/06; Action: Ecology approval documented in minutes. Completed 11/9/2006.
X	100-114	RL	B. Charboneau	Unknown	RL will send Ecology the schedule for the EM-22 Treatability Test Report	Open: 10/12/06; Action: Schedule entered into minutes. Completed 11/9/2006.

X	100-115	RL	B. Charbonneau	100-D	RL will send Ecology the plans/actions for the 182-D Reservoir.	Open: 10/12/06; actions documented in minutes. Completed 11/9/2006.
X	100-116	RL	J. Zeisloft	100-D	RL and Ecology shall talk about the liquid removal from the 100-D-56 pipe.	Open: 10/12/06; Action: Completed 11/9/2006
X	100-117	ECY	J. Price	100-N	Ecology shall review the revegetation proposal for the 116-N-1 site and provide feedback.	Open: 10/12/06; Action: Proposal approved in minutes. Completed 11/9/2006.
X	100-118	ECY	J. Price	100-D	Ecology shall review the 100-D-56 chromium treatment plan	Open: 10/12/06; Action: Ecology submitted comments. Completed 11/9/2006.
X	300-003	RL	C. Smith	300-FF-2	RI shall provide EPA with the contamination control measures to move the MO-905 trailer within the onsite area.	Open: 10/12/06; Action: Completed 10/18/2006
O	100-119	RL	J. Morse	100-HR-3	RL (John Morse) will set up a meeting with Ecology (John Price) on overall long-term picture for 100-HR-3.	Open: 11/9/06; Action:
O	100-120	RL	J. Morse	100-HR-3	RL (John Morse) will provide Ecology (Mandy Jones) with the 100-D well installation, as well as the EM-22 Treatability Test well installation plans.	Open: 11/9/06; Action:

100/300 Area UMM
Action List

O	100-121	RL	J. Morse	100-FR-3	RL (John Morse) will provide EPA (Rod Lobos) with the Contaminates of Concern (COCs) plot for each well in 100-FR-3, including a list of wells sampled in October 2006 and those scheduled to be sampled in November 2006.	Open: 11/9/06; Action:
O	100-122	RL	J. Zeisloft	100-D	RL (Jamie Zeisloft) will set up a meeting with Ecology on the holistic 100-D characterization approach.	Open: 11/9/06; Action:
O	100-123	RL	J. Zeisloft	100-D	RL (Jamie Zeisloft) will provide Ecology (Mandy Jones) with the overall 100-D project remediation schedule.	Open: 11/9/06; Action:
O	300-004	RL	C. Smith	618-10/11	RL (Chris Smith) will set up a meeting with EPA to discuss the M-16-67 milestone for 618-10/11 to ensure there are no issues with the design solution and completing the milestone.	Open: 11/9/06; Action:

Attachment D

100/300 Area Unit Manager Meeting
November 09, 2006
Washington Closure Hanford Building
2620 Fermi Avenue, Richland, WA 99352
Room C209
1:00-4:30 p.m.

1:00 - 1:50 p.m. **Executive Session (Tri-Parties Only):**

- Ecological Risk (Larry Gadbois)

2:00 p.m. - 2:20 p.m. **Administrative:**

- Approval and signing of previous meeting minutes (October 2006)
- Update to Action Items
- ~~Next UMM (12/14/2006)~~
- New Project Actions, Commitments, Agreements

2:20 - 4: 30 p.m. **Open Session: Project Updates:**

- 100/300 Area Groundwater
- 100/300 Area Field Remediation and Closure (FR)
  - Sampling and FR Design (Lorna Dittmer/Rich Carlson)
  - 100-B/C (Dean Strom)
  - 118-K-1 (Dale Obenauer)
  - 100-D (Jon Fancher)
  - 100-N (Scott Parnell)
    - Approval of 1301-N Revegetation
  - 100-F (Mark Buckmaster)
  - 300-FF-2 (John Darby)
  - 618-10/11 (Scott Parnell)
- End States and Final Closure
- D4 (100/300 Area)
- ISS
- Special Topics

Attachment 1

Errata for:

DOE-RL, 2001, *100 Area Burial Grounds Remedial Action Sampling and Analysis Plan*, DOE/RL-2001-35, Rev. 0, U.S. Department of Energy, Richland Operations Office, Richland, Washington.

The current version of the *100 Area Burial Grounds Remedial Action Sampling and Analysis Plan* (DOE/RL-2001-35) presents a ~~former~~ required detection limit for tritium (400 pCi/g) as the overall remedial action goal. On page II-3 in Table II-1 of DOE/RL-2001-35, the row for Tritium (H-3) data uses, and remediation goals will be rewritten to be, the following (to be consistent with the latest revision of *100 Area Remedial Action Sampling and Analysis Plan*, [DOE/RL-96-22]):

Tritium (H-3)	Overburden/layback [c]	15.8
	Site verification - shallow zone	510 [e]; 15.8 (groundwater protection)
	- deep zone	15.8 (groundwater protection)
	Waste designation	1 [g]
	ERDF waste acceptance criteria [d]	No limit

Attachment 2

To: Arlene For Log
Action Item
Agreement

GW Action Items November 9, 2006 100/300 UMM

Action 1: RL (Briant Charboneau) will respond to Ecology's email request on data and analysis request regarding the 100-HR-3 system.

RL requests a follow-up meeting to discuss specifics and better understand the scope of the request. The original request to Ecology was to shut down two of the H extraction wells since they have been below 20 ppb for over a year. This is consistent with the RDR/RAWP.

Action 3: RL (Briant Charboneau) will send Ecology the schedule for the EM-22 Treatability Test Report.

- A concurrent RL/Ecology review of the EC treatability test plan will be delivered the week of November 9, 2006. In accordance with the TPA Agreement a 45 day Agency review is planned.
- TTP for Iron injection: May 31, 2007 (dependent upon contract award)
- Work Plan for Cr Investigation at 100-D: November 31, 2007
- TTP for biostimulation at 100-D (PNNL): January 31, 2007
- Work Plan/SAP for Horn Characterization: February 1, 2007

Action 4: RL (Briant Charboneau) will send Ecology the plans/actions for the 182-D Reservoir.

FH plan is to keep the 182-D Reservoir for the time being. It is being operated at a level of less than 6' and allowed to drift down to 2-3' deep when not in use. DOE is funding some reliability upgrades to the 181-B pumping station that will be completed by December 31, 2007. More reliability upgrades are planned for FY 2009. It may be proposed that once 181-B is upgraded, 182-D can be taken out of service.

Attachment 3

	116-N-1 Propsosed Changes from 116-N-3 Approved Plan	2005 Approved 116-N-3	Plan
Planting Window	Mid November through December	Mid November through early January	September through November
Seeding Technique		Broadcast seed	Drill seed - Drives cost up as subcontractor will generally build in cost for significant equipment repairs/replacement.
Fertilizer		120 lbs Triple 16 at time of seeding	No fertilizer specified at this time - however clause "if deemed advisable based on other 100 area work Triple 16 at 120 lb/ac"
Seed Mix	Increase Bluebunch wheatgrass to 10 lbs/ac while eliminating Thickspike Wheatgrass, as germination and establishment of Thickspike wheatgreass on other sites has been poor. Add 3 lbs/ac bottlebrush squireltail seed, as use of bottlebrush squireltail straw mulch (with subsequent residual seed within) on other 100 Area waste sites indicates successful germination and survival.	Thickspike Wheatgrass 5lbs/ac Bluebunch Wheatgrass 5lbs/ac Indian ricegrass 5 lbs/ac Prarie Junegrass 5 lbs/ac Sandberg's bluegrass 10 lbs/ac needle and thread 1 lbs/ac rabbitbrush and other Hanford Site forbs as available from hand collections. Purchased from a local seed producer and use of seed in storage previously grown under contract for the ERC.	Revegetation Manual Seeding Rates Indian ricegrass 2 lbs/ac Sandberg's bluegrass 2lbs/ac needle and thread 0.5lbs/ac Hand collected sagebrush, yarrow, balsamroot, pine bluegrass, and snow buckwheat
Ployacrylamide tackifier	15 lbs ac, to facilitate seed germination		
Irrigation	2500 gal/ac at time of seeding plus 2500 gal/ac after the shrubs are planted, if needed	1/5 inch of water per acre (5,000 gal/ac) for seed germination	5 gal of water per sagebrush plant immedietly after installation
Mulch		2 tons/ac grass straw and crimped with serrated disk	2 tons/ac straw
Sagebrush	400 sagebrush plants per acre	~340 sagebrush plants per acre.	775 plants per acre. Poor soil properties will not support this density as this would produce smaller stature shrubs yielding lower quality habitat.
Monitioring for Success		5 years	5 years

Attachment 4

100/300 Areas Unit Managers Meeting for November 9, 2006

100-NR-2 Groundwater OU - Russ Fabre

Apatite Pilot Test #1 (199-N-138)

- Performance assessment sampling is ongoing, latest data provided in Figure 1. Locations shown in Figure 3.
- Increase in Sr concentration in aquifer tube (APT-1, 40 ft from N-138) during last sampling event indicates that the treatment solution is continuing to migrate toward the river; additional aquifer tubes will be added to subsequent sampling events to improve our understanding of the impacts at the river shoreline (APT-2&3, 50 ft and 70 ft from N-138, respectively).
- Ongoing evaluation of bench scale testing results indicate that the time required for incorporation of Sr into the apatite structure, and associated decrease in aqueous Sr concentration, may take longer than what was originally anticipated under field conditions.; current estimates based on bench-scale experiments conducted at 25 C indicate that full incorporation of Sr-90 into the apatite structure at site groundwater temperatures to be 1-2 years.
- Sr sequestration performance monitoring will continue bi-monthly.

Apatite Pilot Test #2 (199-N-137)

- A 60,000 gal. apatite solution injection was performed on September 27, 2006
- The injection design for Pilot test #2 was modified based on results from the initial pilot test and subsequent bench scale testing
    - Apatite formulation was modified to account for Ca desorption from sediment and nitrate was removed to slow microbial degradation rate.
    - Injection volume was reduced to account for anticipated lower river stage and subsequent reduction in treatment volume.
    - Treatment interval was comprised of ~ 3 m of Ringold Unit E and the lower portion of the Hanford formation (0.5 m static, 1 to 1.5 m under injection mounding conditions).
    - Maximize injection rate to overwhelm PO_4 sorption kinetics and increase treatment at larger radial distances
- Laboratory analyses to assess injection performance are ongoing; Available Sr-90 performance data is provided in Figure 2. Locations shown in Figure 4.

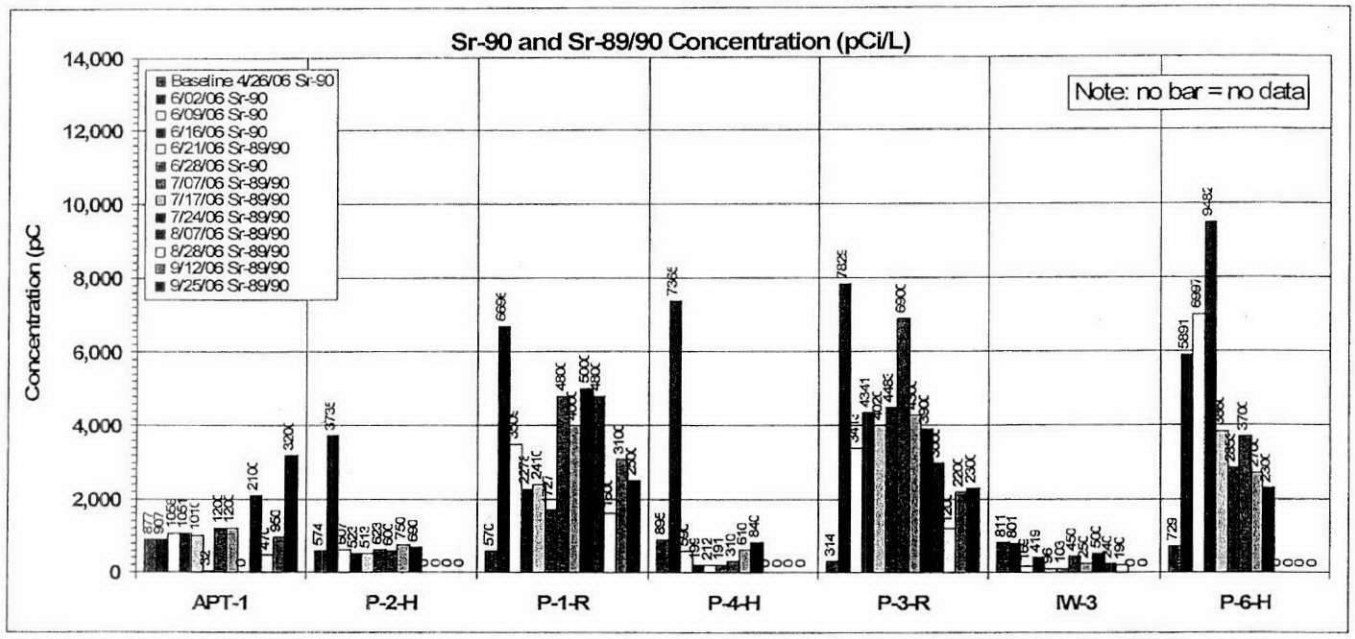


Figure 1. Sr-89/90 performance assessment monitoring through September, 2006 (~ 3 mo) for Pilot Test #1.

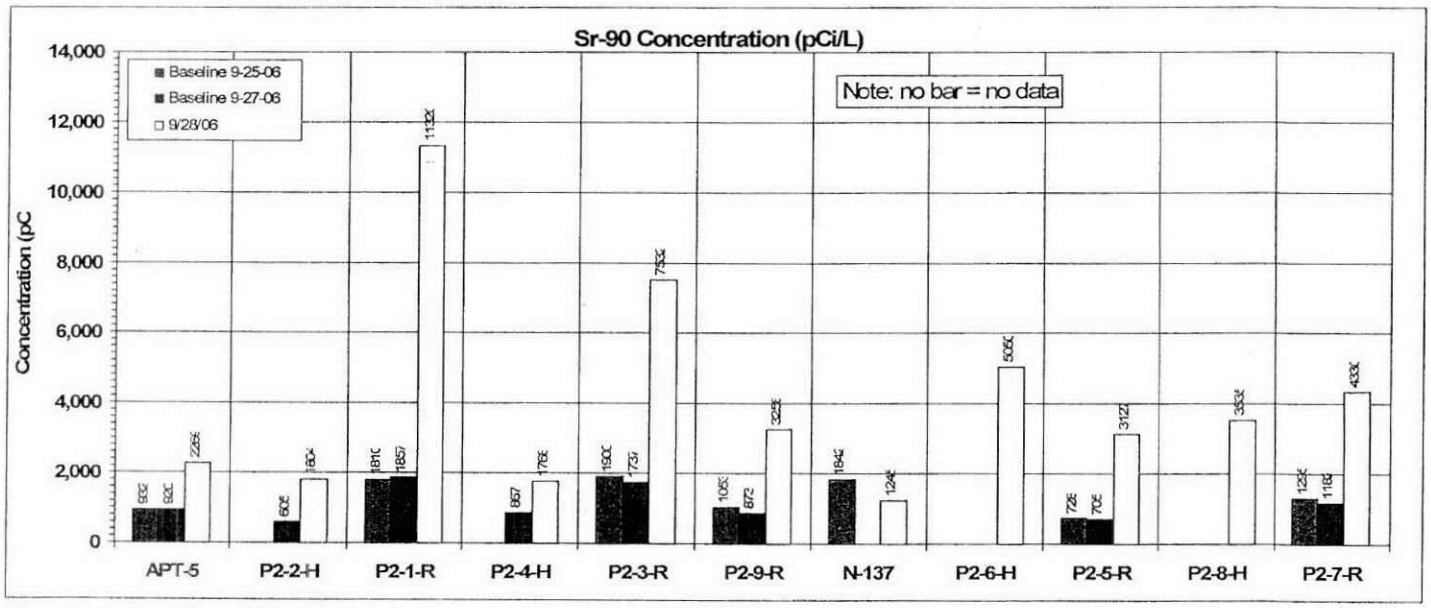


Figure 2. Sr-90 performance assessment monitoring for Pilot Test #2: baseline and first post-injection samples.

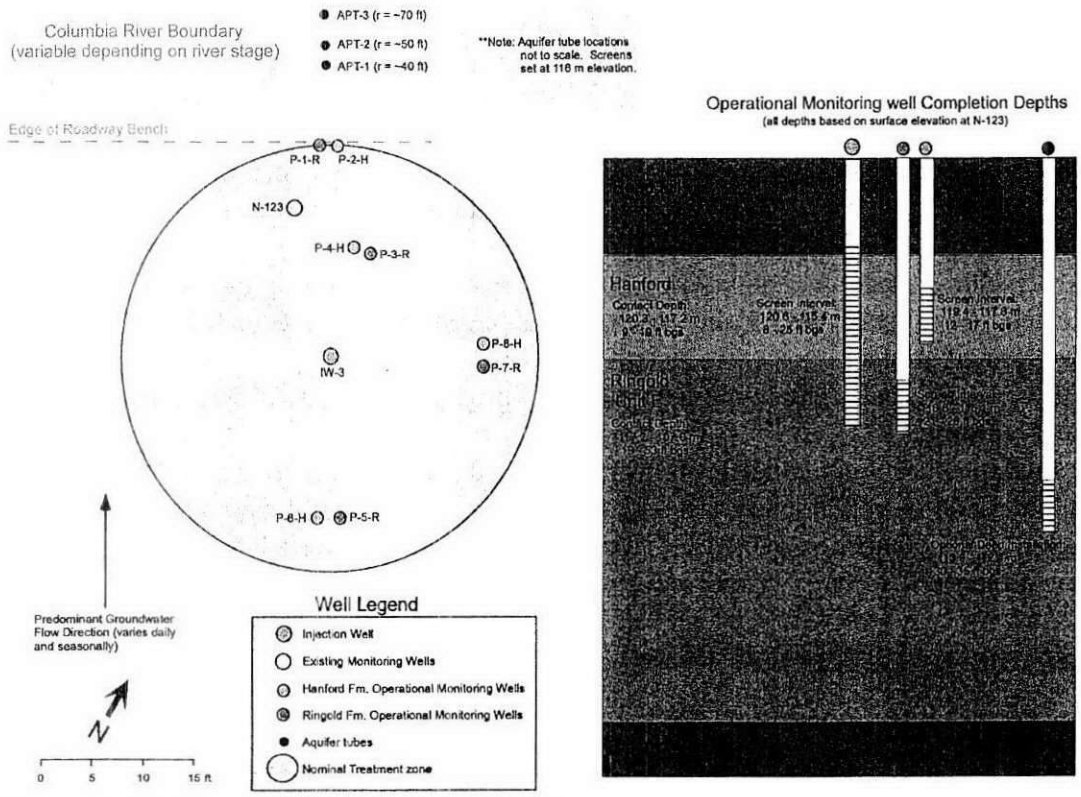


Figure 3. Well layout for Pilot Test Site #1.

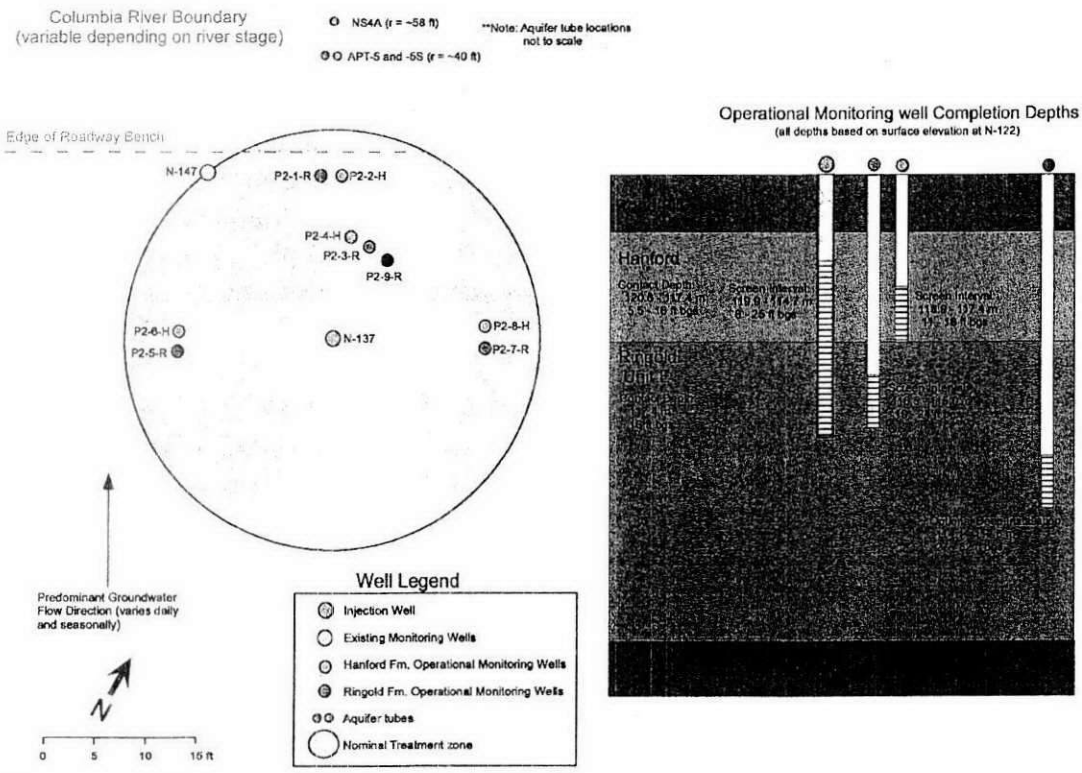


Figure 4. Well layout for Pilot Test Site #2

100-KR-4 Groundwater OU - Ron Jackson

- Remediation Treatment Status
  - For the period of October 1-31, 2006:
    - System operated normally.
    - Total average flow through the system was approximately 282 gpm.
    - Average influent hexavalent chromium concentration was 0.055 mg/L.
  - KR-4 Expansion
    - Work includes grubbing and pouring slab for the treatment building and two transfers' buildings. Three treatment skids are currently being fabricated.
- KW Groundwater Remediation
  - Most of the work is associated with installation of piping and electrical inside the treatment building.
  - Due to the high chromium concentrations in proposed injection well199-K-137, EPA agreed that that this well along with 199-K-108A is not an acceptable site for injecting treated water. The injection site will be located upgradient near well 199-K-35. A revision to the RDR/RAWP will be required to reflect this design change.

100-KR-4: K-Basins Monitoring Task—Bob Peterson (373-9020)

- Leak Detection Monitoring:
  - KE Basin—Tritium concentrations in groundwater near KE Basin remain consistent with previous trends and show no conclusive evidence for shielding water loss to the ground. The most recent results from 199-K-27 remain somewhat elevated (i.e., just above the drinking water standard) compared to the previous year. High water table conditions during summer 2006 remain a possible explanation.
  - KW Basin—Tritium concentrations near KW Basin remain very low and well below the drinking water standard, with no evidence for shielding water impact.
  - Tritium concentrations at 199-K-106A, located approximately 100 meters northeast of the KW Basin and downgradient from the former KW Condensate Crib, remain highly elevated, with the most recent value being 648,000 pCi/L (July sample). The well was sampled again in October, and results should be available for the December unit managers meeting.
- Monitoring Well Network:
  - Monthly monitoring continues at three wells close to the KE Basin, 199-K-27, 199-K-29, and 199-K-109A. Stable conditions at 199-K-29, and the well's position to the "side" of the area most likely to be impacted by leakage, suggests that the frequency at that well could be reduced back to quarterly.
  - KE Basin leak detection wells (199-K-27 and 199-K-109A) are likely to remain in service for at least several months while basin sludge removal activities continue.
  - Additional monitoring wells downgradient from the KE reactor will be installed during November 2006 (contact: Chris Wright, Fluor Hanford, Inc.).
- Reporting:
  - The quarterly K-Basins report for July, August, and September 2006 has been drafted and is currently under PNNL internal review. Distribution will be during November as a .pdf file via email. There are no significant changes to conditions or interpretations compared to the previous report.
  - Work has begun on the K-Basins subsection of the FY 2006 annual groundwater report.

100-HR-3 Groundwater OU - Ron Jackson

- Remediation Treatment Status
  - For the period October 1-31, 2006:
    - System operated normally with exception of outage on October 26, 2006.
    - Total average flow through the system was approximately 146 gpm.
    - Average influent hexavalent chromium concentration for H Area was approximately less than 0.017 mg/L.
    - Average influent hexavalent chromium concentration for D Area was approximately 0.145 mg/L.

- **RL requests a meeting with Ecology (see Action #1) to discuss and obtain approval of the shut down of extraction wells 199-H4-4 and 199-H4-63 since the hexavalent chromium levels in these wells have been below 20 ppb for at least one year. These wells will return to their original purpose as compliance wells. This phased approach for shutting down extraction wells is consistent with the 100-HR-3/100-KR-4 Remedial Design Report/Remedial Action Work Plan. (See Figure 5 below)**

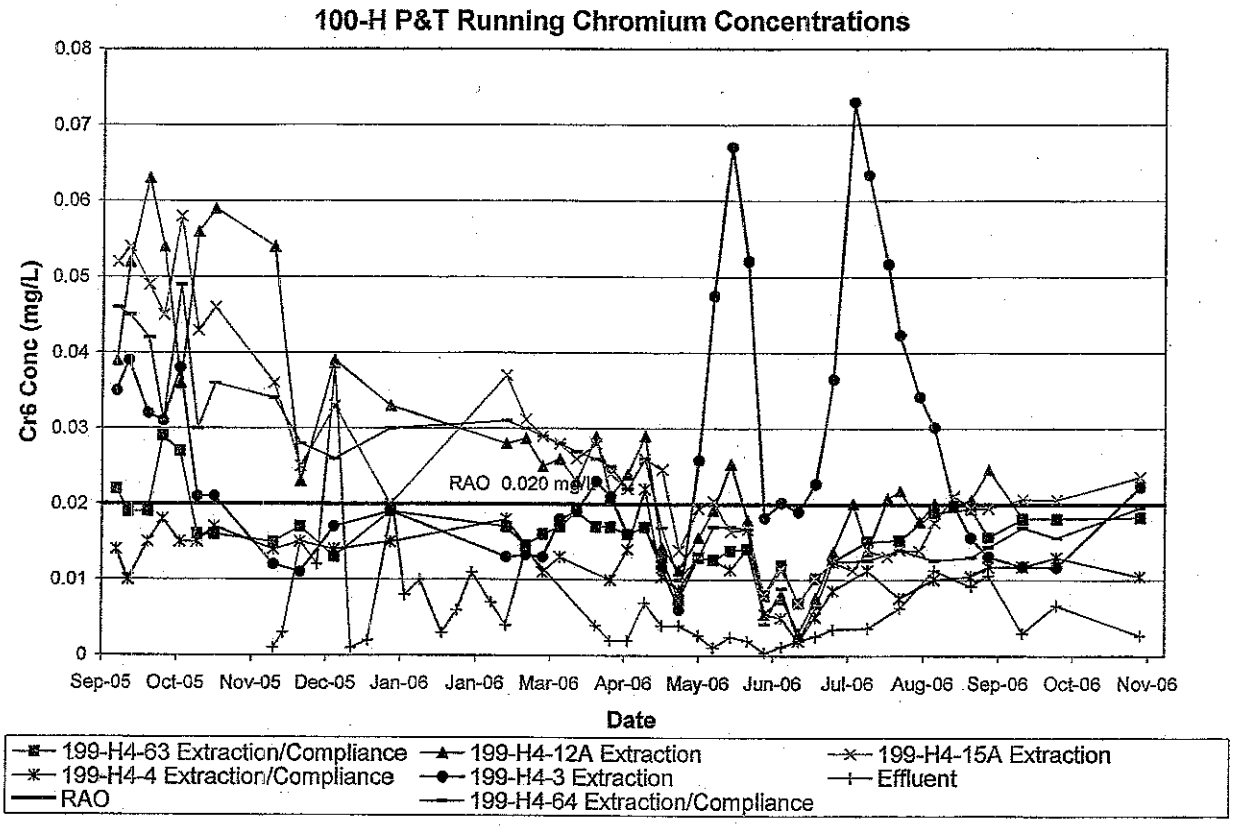
- DR-5 Treatment Status
  - For the period October 1-31, 2006:
    - System operated normally. Well D5-20 was brought on line on October 5, 2006 after faulty communication line was replaced.
    - Total average flow was approximately 43 gpm.
    - The average influent hexavalent chromium concentration was 0.839 mg/L.

- Summary of ISRM Status

  - Collected and analyzed samples from ISRM barrier wells in October. Chromium concentrations were slightly higher than September's samples, which is normal for this time of year.
  - **In an E-mail from John Price, Ecology, to Arlene Tortoso, RL, dated, October 25, 2006, Ecology approved going to an annual report for ISRM. Ecology agreed that monthly data summaries were sufficient for reporting in between. This data are also available in Virtual Library Data Base, which is accessible to Ecology.**

- EM-22 Technology Developments
  - The Proposals for injecting micron-size iron into selected ISRM boreholes and perform an electrocoagulation pilot test in the 100-D Area have been submitted. Awards are expected in November, 2006.
  - The Decisional Draft of the EC treatability test report was delivered to Ecology at the UMM on November 9, 2006. A 45 day review period by the Ecology is planned.

Figure 5 – 100-H Chromium Trend Plots (Draft)



100-BC-5 and 100-FR-3 Operable Units—Mary Hartman (373-0028)

- 100-BC-5: Nothing new to report. Wells are scheduled for sampling in January 2007.
- 100-FR-3: Wells were scheduled for sampling in October for FY 2007. Most of the wells were sampled as scheduled; others to be sampled in November.

300-FF-5 Operable Unit—Bob Peterson (373-9020) and Ron Smith (376-5831)

- Operations and Maintenance Plan Requirements:
  - Entire Operable Unit: Updated water table elevation contours and contaminant plume maps as part of preparing for 300-FF-5 section of the FY 2006 annual groundwater report.
  - 300 Area: The most recent semi-annual groundwater sampling event took place in June (results described at the August unit manager meeting). Monthly sampling at four wells near the former 300 Area Process Trenches confirms higher uranium concentrations in this area, as a consequence of relatively high water table conditions this past summer.
  - 618-11 and 618-10 Subregions: The most recent sampling occurred in July (results reported at September unit manager meeting).
  - RCRA Integration, 300 Area Process Trenches: Transmitted semi-annual RCRA monitoring report to Fluor during October.
- Phase III Feasibility Study and Limited Field Investigation:
  - Inventory of remedial action technologies for uranium is nearly complete, screening of technologies continues, and initial findings from LFI have been incorporated into the remediation strategy planning
  - Continued coordination between groundwater flow and transport modelers and Feasibility Study scenario analysts.
  - A draft 300-FF-5 Model Configuration Management Plan is currently under internal PNNL review.
  - Work continues on interpreting the results from the LFI drilling (300 Area, March through May 2006) and on laboratory analyses of samples from the cores retrieved from these boreholes.
  - A report is under preparation to describe the results of the LFI drilling program. A draft report is scheduled for delivery to Fluor in December 2006.
- 618-2 Burial Ground Groundwater Sampling
  - Samples are planned to be collected to characterize the plutonium in the groundwater beneath the burial ground.
  - Planned date for access into the burial ground is after backfilling has been complete. Tentatively scheduled for December 11th.
  - WCH and FH are working on the vehicle for allowing access to the site.
  - A draft Sampling and Analysis Instruction will be submitted to RL and EPA for their review and concurrence.
  - Selected pages of the 300-FF-5 Waste Management Plan have been modified to add the three boreholes that will be used to collect the samples and to change the storage location. These pages have been submitted to RL and EPA for review and concurrences.

Attachment 5

(2)

Field Remediation and Sample Design Cleanup Verification for the November 2006 UMM

AREA	DOE-RL/REGULATOR DELIVERABLE	START	FINISH
300 AREA			
	Cultural/Ecological APE Review	10/23/2006	11/20/2006
	DOE Review of Cultural Review	10/23/2006	12/6/2006
	RL/Reg review of Draft A Closeout Document for 618-2	1/2/2007	2/5/2007
	RL/Reg Signature & Issue Rev 0 Closeout Document for 618-2	2/20/2007	2/26/2007
	Air Monitoring Plan for RL/Reg Approval for 618-1 Design	2/26/2007	3/8/2007
	Cultural/Ecological APE Review for 618-1 Design	3/1/2007	4/9/2007
	RL/Regulator Design Briefing for 618-1 Design	3/15/2007	3/15/2007
	RL/Ecology Review of AB Documents/FHC for 618-1 Design	3/20/2007	5/23/2007
	Design Eng ESD (FY07) RL/Ecology Rev of Draft A	4/11/2007	5/29/2007
	Air Monitoring Plan for RL/Reg Approval (300 Area Design #2)	7/10/2007	7/23/2007
	Cultural/Ecological APE Review (300 Area Design #2)	7/26/2007	8/31/2007
	RL/Regulator Design Briefing (300 Area Design #2)	8/29/2007	8/29/2007
100-IU-6 UXO			
	Air Monitoring Plan for RL/Reg Approval	6/6/2007	6/19/2007
	Cultural/Ecological APE Review	6/11/2007	7/18/2007
	RL/Regulator Design Briefing	8/6/2007	8/6/2007
618-10/11			
	RL/Regulators Review 618-10/11 Design Solution	12/19/2006	3/19/2006
	RL Transmit 618-10/11 SAP to Regulators Review	5/22/2007	6/5/2007
	RL/Reg Review of 618-10/11 SAP	6/6/2007	7/24/2007
	DOE Review of Cultural Review 618-10/11	8/8/2007	9/10/2007
	RL/Reg Signatures/Finalize/Issue 618-10/11 SAP	8/20/2007	8/30/2007
100-B/C			
	RL/Regulator Approve/Signature Rev. 0 WI 100-C-9	10/23/2006	10/26/2006
	RL/Reg review of Draft A Closeout 128-B-3	10/23/2006	11/28/2006
	RL/Regulator Review Draft A WI for (100-B-22)	11/8/2006	12/7/2006
	RL/Reg review of Draft A Closeout Doc. 1607-B2	11/8/2006	12/14/2006
	RL/Reg review of Draft A Closeout Doc 100-B-14	11/9/2006	12/18/2006
	RL/Regulator Review Draft A WI for 126-B-2	11/30/2006	1/2/2007
	RL/Regulator Review Draft A WI for 1607-B1	11/30/2006	1/2/2007
	RL/Regulator Review Draft A WI for (100-B-18)	12/4/2006	1/3/2007
	RL/Regulator Review Draft A WI for (100-B-19)	12/4/2006	1/3/2007
	RL/Regulator Review Draft A WI for (100-B-21)	12/4/2006	1/3/2007
	RL/Reg review of Draft A Closeout Doc. 100-C-9	12/11/2006	1/17/2007
	RL/Reg Sig & Issue Rev 0 Closeout Doc 128-B-3	12/18/2006	12/21/2006
	RL/Regulator Sign Rev. 0 WI for (100-B-22)	12/19/2006	12/28/2006
	RL/Regulator Review Draft A WI for (100-B-23)	12/19/2006	1/18/2007
	RL/Reg Rev of Draft A Closeout Doc. 118-C-1	12/28/2006	1/10/2007
	RL/Reg Rev of Draft A Closeout Doc 118-B-1	12/28/2006	2/1/2007
	RL/Reg Sig. & Issue Rev 0 Closeout Doc. 1607-B2	1/9/2007	1/15/2007
	RL/Reg Sign & Issue Rev 0 Closeout Doc 100-B-14	1/10/2007	1/10/2007
	RL/Regulator Sign Rev. 0 WI for 126-B-2	1/11/2007	1/18/2007
	RL/Regulator Sign Rev. 0 WI for 1607-B1	1/11/2007	1/18/2007
	RL/Regulator Sign Rev. 0 WI for (100-B-18)	1/15/2007	1/22/2007
	RL/Regulator Sign Rev. 0 WI for (100-B-19)	1/15/2007	1/22/2007
	RL/Regulator Sign Rev. 0 WI for (100-B-21)	1/15/2007	1/22/2007
	RL/Regulator Review Draft A WI 116-C-3	1/29/2007	2/1/2007
	RL/Regulator Sign Rev. 0 WI for (100-B-23)	1/30/2007	2/6/2007
	RL/Reg Sig. & Issue Rev 0 Closeout Doc. 100-C-9	2/6/2007	2/12/2007
	RL/Regulator Approve/Signature Rev. 0 WI 116-C-3	2/12/2007	2/14/2007

Field Remediation and Sample Design Cleanup Verification for the November 2006 UMM

AREA	DOE-RL/REGULATOR DELIVERABLE	START	FINISH
100-B/C Continued			
	RL/Reg Review Draft A Closure Doc for 126-B-2	6/5/2007	7/19/2007
	RL/Reg Review Draft A Closure Doc for 1607-B1	6/5/2007	7/19/2007
	Air Monitoring Plan for RL/Reg Approval	6/5/2007	6/19/2007
	Cultural/Ecological APE Review for 100-C-7	6/12/2007	7/19/2007
	RL/Reg review of Draft A Closeout Doc. 116-C-3	6/20/2007	7/25/2007
	RL/Reg Sig. & Issue Rev 0 Closeout Doc. 116-C-3	8/13/2007	8/16/2007
	RL/Reg Sign Rev. 0 Closure Doc for 126-B-2	8/13/2007	8/20/2007
	RL/Reg Sign Rev. 0 Closure Doc for 1607-B1	8/13/2007	8/20/2007
	RL/Regulator Design Briefing for 100-C-7	9/12/2007	9/12/2007
100-H			
	RL/Regulator Review Draft A WI 100-H-28:9	**10/4/2006**	11/9/2006
	RL/Reg Approve/Signature 1607-H3 Rev. 0 WI	10/23/2006	10/26/2006
	RL/Reg Approve/Signature 1607-H1 Rev. 0 WI	10/23/2006	10/26/2006
	RL/Reg Approve/Signature Rev. 0 WI 128-H-2	10/23/2006	10/26/2006
	RL/Reg Approve/Sign Rev. 0 WI 128-H-3	10/23/2006	10/26/2006
	RL/Regulator Approve/Sign Rev. 0 WI 100-H-28:3	10/23/2006	11/15/2006
	RL/Regulator Approve/Sign Rev. 0 WI 100-H-28:4	10/23/2006	11/15/2006
	RL/Reg Approv/Sign Rev.0 Closure Doc 100-H-28:10	10/30/2006	11/2/2006
	RL/Regulator Approve/Sign Rev. 0 WI 100-H-28:5	11/6/2006	11/9/2006
	DOE/EPA/Review & Approval AMP for 100 H Design	1/2/2007	1/15/2007
	RL/Regulator Approve/Sign Rev. 0 WI 100-H-28:9	11/20/2006	11/28/2006
	100-H DOE Review Bid	3/29/2007	4/27/2007
	100-H Award Subcontract -	4/30/2007	4/30/2007
	RL/Reg Review Draft A Closure Doc for 100-H-28:2	8/14/2007	9/27/2007
	RL/Reg Review Draft A Closure Doc for 100-H-28:3	8/20/2007	10/3/2007
	RL/Reg Review Draft A Closure Doc for 100-H-28:4	8/23/2007	10/9/2007
	RL/Reg Sign Rev. 0 Closure Doc for 100-F-45	8/29/2007	9/6/2007
	RL/Reg Review Draft A Closure Doc for 100-H-28:5	8/29/2007	10/15/2007
	RL/Reg Review Draft A Closure Doc for 100-H-3	9/5/2007	10/18/2007
	RL/Reg Review Draft A Closure Doc for 100-H-4	9/11/2007	10/24/2007
	RL/Reg Review Draft A Closure Doc for 100-H-7	9/17/2007	10/30/2007
	RL/Reg Review Draft A Closure Doc for 128-H-2	9/20/2007	11/5/2007
	RL/Reg Review Draft A Closure Doc for 128-H-3	9/26/2007	11/8/2007
100-N			
	RL/Reg Sign/Finalize/Issue 100-NR-1 RDR	**10/12/2006**	11/9/2006
	RL/Reg Sign/Finalize/Issue 100-NR-1 SAP	**10/12/2006**	11/9/2006
	RL/Reg Signature & Issue Rev 0 Closeout Document for 116-N-1	10/23/2006	10/26/2006
	ESD - RL/Regulator Review of Draft	1/31/2007	4/23/2007
	RL/Regulator Review Draft A WI for 100-N-28	2/27/2007	3/26/2007
	RL/Regulator Review Draft A WI for 100-N-53	3/6/2007	4/2/2007
	RL/Regulator Review Draft A WI for 100-N-55	3/13/2007	4/9/2007
	RL/Regulator Review Draft A WI for 100-N-65	3/20/2007	4/16/2007
	RL/Regulator Review Draft A WI for 100-N-66	3/27/2007	4/23/2007
	RL/Regulator Review Draft A WI for 100-N-68	4/3/2007	4/30/2007
	RL/Regulator Sign Rev. 0 WI for 100-N-28	4/4/2007	4/11/2007
	RL/Regulator Review Draft A WI for 100-N-79	4/10/2007	5/7/2007
	RL/Regulator Sign Rev. 0 WI for 100-N-53	4/11/2007	4/18/2007
	RL/Regulator Review Draft A WI 100-N-62 Pipes	4/17/2007	5/14/2007
	RL/Regulator Review Draft A WI for 120-N-4	4/17/2007	5/14/2007
	RL/Regulator Review Draft A WI for 628-2	4/17/2007	5/14/2007
	RL/Regulator Sign Rev. 0 WI for 100-N-55	4/18/2007	4/25/2007

Field Remediation and Sample Design Cleanup Verification for the November 2006 UMM

AREA	DOE-RL/REGULATOR DELIVERABLE	START	FINISH
100 N Continued			
	ESD - Public Review of Draft B	4/24/2007	6/14/2007
	RL/Regulator Sign Rev. 0 WI for 100-N-65	4/25/2007	5/2/2007
	RL/Regulator Sign Rev. 0 WI for 100-N-66	5/2/2007	5/9/2007
	RL/Regulator Sign Rev. 0 WI for 100-N-68	5/9/2007	5/16/2007
	Air Monitoring Plan for RL/Reg Approval for 100 N Design	5/15/2007	5/29/2007
	RL/Regulator Sign Rev. 0 WI for 100-N-79	5/16/2007	5/23/2007
	RL/Regulator Sign Rev. 0 WI 100-N-62 Pipes	5/23/2007	5/31/2007
	RL/Regulator Sign Rev. 0 WI for 120-N-4	5/23/2007	5/31/2007
	RL/Regulator Sign Rev. 0 WI for 628-2	5/23/2007	5/31/2007
	Cultural/Ecological APE Review for 100-N Design	5/23/2007	7/2/2007
	ESD - Issue Rev. 0 of ESD	6/18/2007	7/12/2007
	RL Review of AB Documents/FHC for 100-N Design	6/21/2007	8/27/2007
	RL/Regulator Review Draft A WI 100 N Misc Pipe	8/8/2007	9/5/2007
	RL/Regulator Design Briefing for 100-N Design	8/16/2007	8/16/2007
	RL/Regulator Sign Rev. 0 WI 100N Misc Pipe	9/17/2007	9/24/2007
100-D			
	RL Prepare SER for 100-D ASA	11/20/2006	12/8/2006
	RL/Regulator Review 132-D-1 Draft A Closure Doc	11/13/2006	12/18/2006
	RL/Reg review of Draft A Closeout Doc 100-D-50:1	12/6/2006	1/23/2007
	RL/Regulator Review Draft A WI for 100-D-56	2/7/2007	3/7/2007
	RL/Reg Sign/Issue Rev 0 Closure Doc 100-D-50:1	2/12/2007	2/15/2007
	RL/Regulator Review Draft A WI for 100-D-30	2/20/2007	3/19/2007
	RL/Regulator Review Draft A WI for 126-DR-1	3/1/2007	3/28/2007
	RL/Regulator Sign Rev. 0 WI for 100-D-56	3/19/2007	3/26/2007
	RL/Regulator Sign Rev. 0 WI for 100-D-30	3/28/2007	4/4/2007
	RL/Regulator Sign Rev. 0 WI for 126-DR-1	4/9/2007	4/16/2007
	RL/Regulator Review Draft A WI for 126-D-2	4/9/2007	5/3/2007
	RL/Regulator Review Draft A WI for 120-D-2	4/19/2007	5/16/2007
	RL/Regulator Review Draft A WI for 100-D-2	4/23/2007	5/17/2007
	RL/Regulator Sign Rev. 0 WI for 126-D-2	5/15/2007	5/22/2007
	RL/Regulator Sign Rev. 0 WI for 120-D-2	5/29/2007	6/5/2007
	RL/Regulator Sign Rev. 0 WI for 100-D-2	5/30/2007	6/6/2007
	RL/Regulator Review Draft A WI for 1607-D2:2	6/5/2007	7/2/2007
	RL/Regulator Review Draft A WI for 100-D-1	6/7/2007	7/5/2007
	RL/Regulator Review Draft A WI for 116-D-5	6/19/2007	7/17/2007
	RL/Regulator Review Draft A WI for 116-DR-5	6/27/2007	7/25/2007
	RL/Regulator Sign Rev. 0 WI for 1607-D2:2	7/12/2007	7/19/2007
	RL/Regulator Sign Rev. 0 WI for 100-D-1	7/17/2007	7/24/2007
	Air Monitoring Plan for RL/Reg Approval Remaining Sites Design (RSD)	7/19/2007	8/2/2007
	Air Monitoring Plan for RL/Reg Approval Failed Confirmatory Sites Design (FCS)	7/19/2007	8/2/2007
	RL/Regulator Review Draft A WI for 100-D-29	7/24/2007	8/20/2007
	RL/Regulator Sign Rev. 0 WI for 116-D-5	7/26/2007	8/2/2007
	Cultural/Ecological APE Review (RSD)	7/26/2007	8/9/2007
	Cultural/Ecological APE Review (FCS)	7/26/2007	8/9/2007
	RL/Regulator Review Draft A WI for 100-D-32	7/30/2007	8/23/2007
	RL/Regulator Sign Rev. 0 WI for 116-DR-5	8/6/2007	8/13/2007
	RL/Regulator Review Draft A WI for UPR-100-D-5	8/8/2007	9/5/2007
	RL/Regulator Design Briefing (RSD)	8/13/2007	8/13/2007
	RL/Regulator Design Briefing (FCS)	8/13/2007	8/13/2007
	RL/Regulator Review Draft A WI for 100-D-45	8/14/2007	9/11/2007
	RL/Reg Review Draft A Closure Doc for 126-DR-1	8/22/2007	10/8/2007
	RL/Regulator Review Draft A WI for 100-D-43	8/28/2007	9/25/2007

Field Remediation and Sample Design Cleanup Verification for the November 2006 UMM

AREA	DOE-RL/REGULATOR DELIVERABLE	START	FINISH
100-D Continued			
	RL/Regulator Sign Rev. 0 WI for 100-D-29	8/29/2007	9/6/2007
	RL/Regulator Sign Rev. 0 WI for 100-D-32	9/5/2007	9/12/2007
	RL/Reg Review Draft A Closure Doc for 100-D-32	9/5/2007	9/27/2007
	RL/Reg Review Draft A Closure Doc for100-D-56	9/5/2007	10/18/2007
	RL/Regulator Review Draft A WI for 118-D-5	9/6/2007	10/3/2007
	RL/Reg Review Draft A Closure Doc for 100-D-45	9/11/2007	9/27/2007
	RL/Regulator Sign Rev. 0 WI for UPR-100-D-5	9/17/2007	9/24/2007
	RL/Reg Review Draft A Closure Doc for 100-D-30	9/17/2007	10/30/2007
	RL/Regulator Sign Rev. 0 WI for 100-D-45	9/20/2007	9/27/2007
	RL/Reg Review Draft A Closure Doc for 100-D-1	9/26/2007	9/27/2007
100-F			
	RL/Reg review of Draft A Closeout Docm. 1607-F3	**7/19/2006**	11/27/2006
	RL/Reg Sign.& Issue Rev 0 Closeout Docm. 128-F-3	**10/2/2006**	10/23/2006
	RL/Reg Sign. & Issue Rev 0 Closeout Docm.1607-F7	**10/2/2006**	10/23/2006
	RL/Reg review of Draft A Closeout Docm. 118-F-7	**10/2/2006**	10/24/2006
	RL/Reg Review Draft A Closure Doc for -118-F-3	11/1/2006	11/16/2006
	RL/Reg Review Draft A Closure Doc for -100-F-20	11/27/2006	12/21/2006
	RL/Reg Sign Rev 0 Closure Doc for -118-F-3	11/20/2006	11/29/2006
	RL/Reg review of Draft A Closeout Docm. 116-F-15	11/27/2006	12/14/2006
	RL/Regulator Review Draft A WI for 100-F-41	12/12/2006	1/11/2007
	RL/Regulator Review Draft A WI for 100-F-44	12/12/2006	1/11/2007
	RL/Regulator Review Draft A WI for 100-F-46	12/12/2006	1/11/2007
	RL/Reg Sign.& Issue Rev 0 Closeout Docm. 1607-F3	12/14/2006	12/20/2006
	RL/Regulator Review Draft A WI for 100-F-45	12/19/2006	1/18/2007
	RL/Regulator Review Draft A WI for 100-F-47	12/19/2006	1/18/2007
	RL/Regulator Review Draft A WI for 100-F-48	12/19/2006	1/18/2007
	RL/Regulator Review Draft A WI for 100-F-49	12/19/2006	1/18/2007
	RL/Regulator Review Draft A WI for 100-F-50	12/19/2006	1/18/2007
	RL/Reg Sign Rev 0 Closure Doc for -100-F-20	12/27/2006	1/4/2007
	RL/Regulator Review Draft A WI for 100-F-51	12/28/2006	1/25/2007
	RL/Regulator Review Draft A WI for 100-F-52	12/28/2006	1/25/2007
	RL/Regulator Review Draft A WI for 100-F-53	12/28/2006	1/25/2007
	RL/Regulator Review Draft A WI for 100-F-54	12/28/2006	1/25/2007
	RL/Regulator Review Draft A WI for 100-F-55	1/8/2007	2/1/2007
	RL/Regulator Review Draft A WI for 100-F-56	1/8/2007	2/1/2007
	RL/Regulator Review Draft A WI for 100-F-57	1/8/2007	2/1/2007
	RL/Reg Sign.&Issue Rev 0 Closeout Docm 116-F-15	1/9/2007	1/15/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-41	1/23/2007	1/30/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-44	1/23/2007	1/30/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-46	1/23/2007	1/30/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-45	1/30/2007	2/6/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-47	1/30/2007	2/6/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-48	1/30/2007	2/6/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-49	1/30/2007	2/6/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-50	1/30/2007	2/6/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-51	2/6/2007	2/13/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-52	2/6/2007	2/13/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-53	2/6/2007	2/13/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-54	2/6/2007	2/13/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-55	2/13/2007	2/21/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-56	2/13/2007	2/21/2007
	RL/Regulator Sign Rev. 0 WI for 100-F-57	2/13/2007	2/21/2007

Field Remediation and Sample Design Cleanup Verification for the November 2006 UMM

AREA	DOE-RL/REGULATOR DELIVERABLE	START	FINISH
100-F Continued			
	RL/Reg Review Draft A WI for -1607-F1	2/13/2007	3/13/2007
	RL/Reg Review Draft A WI for -1607-F4	2/13/2007	3/13/2007
	RL/Reg Sign Rev 0 WI for -1607-F1	3/14/2007	3/21/2007
	RL/Reg Sign Rev 0 WI for -1607-F4	3/14/2007	3/21/2007
	RL/Reg Review Draft A WI for -118-F-8	3/26/2007	4/19/2007
	RL/Reg Review Draft A WI for -100-F-36	3/26/2007	5/7/2007
	RL/Regulator Review Draft A WI 120-F-1	4/5/2007	4/25/2007
	RL/Reg review of Draft A Closeout Docm. 118-F-6	4/11/2007	5/8/2007
	RL/Reg Review Draft A Closure Doc for -118-F-5	4/12/2007	5/29/2007
	RL/Reg review of Draft A Closeout Docm. 128-F-2	4/17/2007	5/14/2007
	RL/Reg Sign Rev 0 WI for -118-F-8	4/24/2007	5/1/2007
	RL/Regulator Approve/Signature Rev. 0 WI 120-F-1	5/3/2007	5/9/2007
	RL/Reg Sign Rev 0 WI for -100-F-36	5/8/2007	5/15/2007
	RL/Reg Sign Rev 0 Closure Doc for -118-F-5	5/30/2007	6/6/2007
	RL/Reg Sign. & Issue Rev 0 Closeout Docm.128-F-2	6/4/2007	6/7/2007
	RL/Reg Review Draft A Closure Doc for 100-F-41	6/14/2007	7/31/2007
	RL/Reg Review Draft A Closure Doc for 100-F-44	6/14/2007	7/31/2007
	RL/Reg Review Draft A Closure Doc for 100-F-46	6/14/2007	7/31/2007
	RL/Reg Review Draft A Closure Doc for 100-F-45	6/21/2007	8/7/2007
	RL/Reg Review Draft A Closure Doc for -118-F-1	6/27/2007	8/13/2007
	RL/Reg Review Draft A Closure Doc for 100-F-57	7/9/2007	8/21/2007
	RL/Reg Review Draft A Closure Doc for 132-F-4:2	8/1/2007	9/17/2007
	RL/Reg Review Draft A Closure Doc for -120-F-1	8/6/2007	9/19/2007
	RL/Reg Review Draft A Closure Doc for -118-F-2	8/6/2007	9/19/2007
	RL/Reg Review Draft A Closure Doc for -Pipeline	8/6/2007	9/19/2007
	RL/Reg Sign Rev 0 Closure Doc for -118-F-1	8/14/2007	8/21/2007
	RL/Reg Review Draft A Closure Doc for -100-F-36	8/14/2007	9/27/2007
	RL/Reg Review Draft A Closure Doc for -118-F-8	8/14/2007	9/27/2007
	RL/Reg Review Draft A Closure Doc for -1607-F1	8/14/2007	9/27/2007
	RL/Reg Review Draft A Closure Doc for -1607-F-4	8/14/2007	9/27/2007
	RL/Reg Sign Rev. 0 Closure Doc for 100-F-41	8/22/2007	8/29/2007
	RL/Reg Sign Rev. 0 Closure Doc for 100-F-44	8/22/2007	8/29/2007
	RL/Reg Sign Rev. 0 Closure Doc for 100-F-46	8/22/2007	8/29/2007
	RL/Reg Sign Rev. 0 Closure Doc for 100-F-57	9/13/2007	9/20/2007
	RL/Reg Sign Rev 0 Closure Doc for -100-F-36	9/20/2007	9/27/2007
	RL/Reg Sign Rev 0 Closure Doc for -120-F-1	9/20/2007	9/27/2007
	RL/Reg Sign Rev 0 Closure Doc for -118-F-2	9/20/2007	9/27/2007
	RL/Reg Sign Rev 0 Closure Doc for -118-F-8	9/20/2007	9/27/2007
	RL/Reg Sign Rev 0 Closure Doc for Pipeline	9/20/2007	9/27/2007
	RL/Reg Sign Rev 0 Closure Doc for -1607-F1	9/20/2007	9/27/2007
	RL/Reg Sign Rev 0 Closure Doc for -1607-F4	9/20/2007	9/27/2007
100-K			
FK	Sample Design - 118-K-1	4/2/2007	4/12/2007

Attachment 6

Waste Site: 100-B-14:1 Process Sewer	**BACKFILL CONCURRENCE CHECKLIST** (Concurrence to Proceed with Waste Site Backfill Operations)	WIDS No: 100-B-14:1

This checklist is a summary of cleanup verification results for the 100-B-14:1 process sewer. The checklist is intended as an agreement allowing the RCCC subcontractor to backfill the excavation prior to the issuance of the final remaining sites verification package. Copies of calculations are included with this checklist with results summarized below.

Regulatory Requirement	Remedial Action Goals (RAG)	Results	RAG Attained	Ref.
Direct Exposure – Radionuclides	1. Attain 15 mrem/yr dose rate above background over 1,000 years.	1. Cesium-137 was quantified below the 15 mrem/yr dose-equivalence lookup value in the shallow zone decision unit and below background in the overburden decision unit. Europium-155 was quantified below the 15 mrem/yr dose-equivalence lookup value in the overburden decision unit. Carbon-14 was detected above the 15 mrem/yr dose-equivalence lookup value in two sample from the shallow zone decision unit, but was not detected by resampling following additional remediation in the sample areas. Carbon-14 was initially detected above the 15 mrem/yr dose-equivalence lookup values in multiple overburden samples. Following additional remediation and a new sampling design for all overburden material, carbon-14 was detected above the 15 mrem/yr dose-equivalence lookup value in one field duplicate sample only (from sub-unit 01). This sub-unit will be used exclusively for backfill into the deep zone, which is not subject to direct exposure requirements. All other radionuclides were not detected by verification sampling.	Yes	A
Direct Exposure – Nonradionuclides	1. Attain individual RAGs.	1. The statistical concentrations of hexavalent chromium (the sole non-radionuclide contaminant of concern [COC]) are below the direct exposure RAGs in the shallow zone and overburden decision units.	Yes	A
Nonradionuclide Risk Requirements	1. Attain hazard quotient of less than 1 for noncarcinogens.	1. The hazard quotients for hexavalent chromium, the sole non-radionuclide COC, are less than 1 for the shallow zone and overburden decision units.	Yes	A
	2. Attain cumulative hazard quotient of less than 1 for noncarcinogens.	2. The cumulative hazard quotients are less than 1 for the shallow zone and overburden decision units.		A
	3. Attain excess cancer risk of $<1 \times 10^{-6}$ for individual carcinogens.	3. The Excess cancer risk values for hexavalent chromium, the sole non-radionuclide COC, are less than 1×10^{-6} for the shallow zone and overburden decision units.		A
	4. Attain a total excess cancer risk of $<1 \times 10^{-5}$ for carcinogens.	4. The cumulative excess carcinogenic risk values are less than 1 for the shallow zone and overburden decision units.		A

Waste Site: 100-B-14:1 Process Sewer	BACKFILL CONCURRENCE CHECKLIST (Concurrence to Proceed with Waste Site Backfill Operations)		WIDS No: 100-B-14:1	
Groundwater/River Protection – Radionuclides	1. Attain single COC groundwater & river RAGs.	1. No radionuclide COCs were quantified above groundwater/river protection lookup values.	Yes	A
	2. Attain National Primary Drinking Water Regulations 4 mrem/yr (beta/gamma) dose standard to target receptor/organ.	2. No radionuclide COCs were quantified above groundwater/river protection lookup values.		A
	3. Meet drinking water standards for alpha emitters: the more stringent of 15 pCi/L MCL or 1/25th of the derived concentration guide for DOE Order 5400.5.	3. No alpha-emittiting radionuclides were identified as site COCs.	N/A	N/A
	4. Meet total uranium standard of 21.2 pCi/L.	4. Uranium was not identified as a site COC and was not detected in gamma energy analysis of verification samples	N/A	N/A
Groundwater/River Protection – Nonradionuclides	1. Attain individual nonradionuclide groundwater and river cleanup requirements.	1. The statistical residual concentrations of hexavalent chromium, the sole non-radionuclide COC, are less than soil RAGs for the protection of groundwater and the Columbia River in all decision units and satisfy the WAC-173-340 3-part test criteria.	Yes	A
Other Supporting Information	1. 95% Upper Confidence Limit Values Calculations			A
	2. Phase 2 Verification Sampling Design*			B
	3. Phase 3 Verification Sampling Design*			C
	4. Variance Calculation*			D
	*Phase I Verification Sampling Design was not implemented due to erroneous decision unit boundaries.			

All citations above and attached sheets are on record with Washington Closure Hanford, Records and Document Control. Above noted regulatory requirements have been attained.

WCH Manager	Date	WCH Project Engineer	Date	DOE Project Manager	Date
	11-8-06		11-8-06		11/6/06

Given the attached information, DOE can proceed with backfill of the site with minimal risk. Final approval that the site has met remedial action objectives and goals will occur with the submittal, review, and approval of the Remaining Sites Verification Package(s) by the lead regulatory agency.

EPA Project Manager	Date	Ecology Project Manager	Date
	11/8/06	N/A	N/A

0575034

Waste Site: 1607-B2:2 & 100-B-14:2, 1607-B2 Septic System and Feeder Lines	**BACKFILL CONCURRENCE CHECKLIST** (Concurrence to Proceed with Waste Site Backfill Operations)	WIDS No: 1607-B2:2 100-B-14:2

This checklist is a summary of cleanup verification results for the 1607-B2 septic tank and collection main (1607-B2:2) and associated feeder piping (100-B-14:2). The checklist is intended as an agreement allowing the RCCC subcontractor to backfill the excavation prior to the issuance of the final remaining sites verification package. Copies of calculations are included with this checklist with results summarized below.

Regulatory Requirement	Remedial Action Goals (RAG)	Results	RAG Attained	Ref.
Direct Exposure – Radionuclides	1. Attain 15 mrem/yr dose rate above background over 1,000 years.	1. No radionuclide contaminants of concern (COCs) or contaminants of potential concern (COPCs) were quantified above dose-equivalence lookup values.	Yes	A
Direct Exposure – Nonradionuclides	1. Attain individual RAGs.	1. Polycyclic aromatic hydrocarbons were detected above the direct exposure RAGs in verification sampling at 100-B-14:2 (area 4), but determined to be the result of asphalt cross-contamination. Asphalt that has been used for structural and construction purposes is excluded from consideration as a dangerous waste, is listed as an inert solid waste, and does not present a significant health risk for this waste site. All other individual COPC concentrations are below the direct exposure criteria.	Yes	A, B
Nonradionuclide Risk Requirements	1. Attain hazard quotient of less than 1 for noncarcinogens.	1. The hazard quotients for individual nonradionuclide COCs/COPCs associated with soil (rather than asphalt) are less than 1.	Yes	C, D, E
	2. Attain cumulative hazard quotient of less than 1 for noncarcinogens.	2. The cumulative hazard quotients are less than 1 for the excavated areas and stockpiled overburden/below cleanup level material.		C, D, E
	3. Attain excess cancer risk of $<1 \times 10^{-6}$ for individual carcinogens.	3. Excess cancer risk values for individual nonradionuclide COCs/COPCs associated with soil (rather than asphalt) are less than 1×10^{-6}.		C, D, E
	4. Attain a total excess cancer risk of $<1 \times 10^{-5}$ for carcinogens.	4. Total excess cancer risk values are less than 1×10^{-5} for the excavated areas and stockpiled overburden/below cleanup level material.		C, D, E
Groundwater/River Protection – Radionuclides	1. Attain single COC groundwater & river RAGs.	1. No radionuclide COCs/COPCs were quantified above groundwater/river protection lookup values.	Yes	A
	2. Attain National Primary Drinking Water Regulations 4 mrem/yr (beta/gamma) dose standard to target receptor/organ.	2. No radionuclide COCs/COPCs were quantified above groundwater/river protection lookup values.		A
	3. Meet drinking water standards for alpha emitters: the more stringent of 15 pCi/L MCL or 1/25th of the derived concentration guide for DOE Order 5400.5.	3. No alpha-emittiting radionuclides were identified as site COCs/COPCs.	N/A	N/A
	4. Meet total uranium standard of 21.2 pCi/L.	4. Uranium was not identified as a site COC/COPC and was not detected in gamma energy analysis of verification samples	N/A	N/A
Groundwater/River Protection – Nonradionuclides	1. Attain individual nonradionuclide groundwater and river cleanup requirements.	1. Multiple COCs/COPCs were quantified above soil RAGs for groundwater and/or river protection, but none are predicted to migrate to groundwater (and thus the Columbia River) within 1,000 years. Therefore, residual concentrations achieve the remedial action objectives for groundwater and river protection.	Yes	A

0575034

Waste Site: 1607-B2:2 & 100-B-14:2, 1607-B2 Septic System and Feeder Lines	**BACKFILL CONCURRENCE CHECKLIST** (Concurrence to Proceed with Waste Site Backfill Operations)	WIDS No: 1607-B2:2 100-B-14:2

Other Supporting Information		
	1. 95% Upper Confidence Limit Values Calculations and Work Instructions for Verification Sampling	C, D, E
	2. Site Location Map	F

All citations above and attached sheets are on record with Washington Closure Hanford, Records and Document Control. Above noted regulatory requirements have been attained.

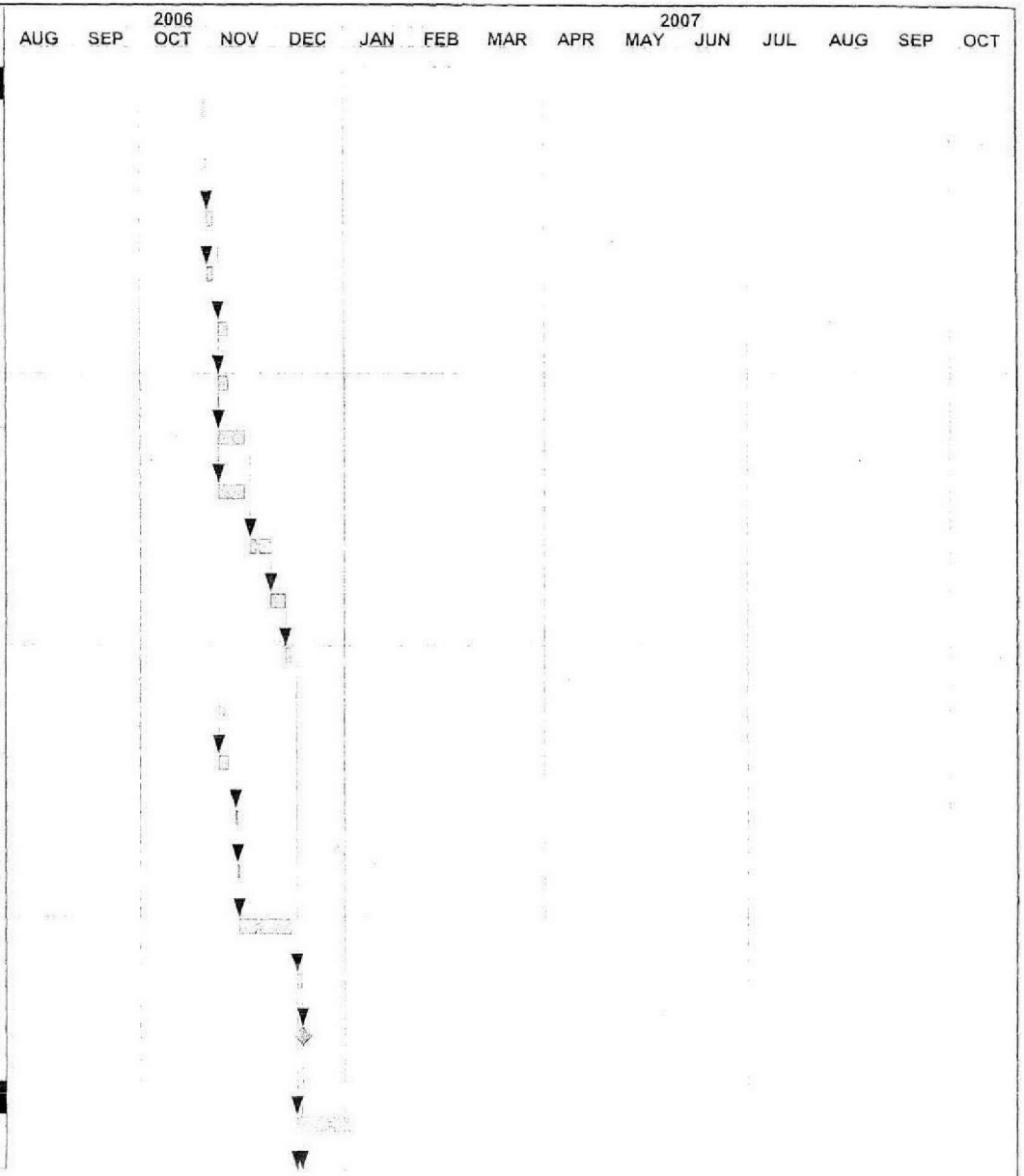
D.N. Strom for L.R. miller via tele-conference

WCH Manager	Date	WCH Resident Engineer	Date	DOE Project Manager	Date
	9-28-06		9-28-06		10/6/06

Given the attached information, DOE can proceed with backfill of the site with minimal risk. Final approval that the site has met remedial action objectives and goals will occur with the submittal, review, and approval of the Remaining Sites Verification Package(s) by the lead regulatory agency.

EPA Project Manager	Date	Ecology Project Manager	Date
	10/5/06	N/A	N/A

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish
Design Revisions				
10000	Prepare Project Schedule (Carlson)	2	30OCT06*	31OCT06
10010	Prepare Design Documents Checklist (Carlson)	2	30OCT06*	31OCT06
10020	Confirm Revisions Req'd or Not (Tina)	2	01NOV06	02NOV06
10030	Incorporate Changes (if needed) (Tina)	2	01NOV06	02NOV06
10040	Revise Exh. D (Tina)	4	06NOV06	09NOV06
10050	Revise Exh. E (Tina)	4	06NOV06	09NOV06
10060	Revise Exh. F (Bentz)	8	06NOV06	16NOV06
10070	Revise Calculation(s) (Tina)	8	06NOV06	16NOV06
10080	Design Review (Tina)	4	20NOV06	28NOV06
10090	Incorp. Review Comments (Tina)	4	29NOV06	05DEC06
10100	Issue Change Notice (Tina)	2	06DEC06	07DEC06
10110	Design Discuss/Treatment w/Regulator (Dean)	2	06NOV06*	07NOV06
10120	Revise Treatment Plan (Peloquin)	4	06NOV06	09NOV06
10130	Internal Review Treatment Plan (Peloquin)	1	13NOV06	13NOV06
10140	Inc. Comments into Treatment Plan (Peloquin)	1	14NOV06	14NOV06
10150	Reg'r Review Treatment Plan (DOE/EPA)	12	15NOV06	07DEC06
10160	Incorporate Reg'r Comments (Peloquin)	2	11DEC06	12DEC06
10170	Issue Treatment Plan (Peloquin)	0	13DEC06	
Subcontractor Preparation				
10180	Subcontract Mob. Equip/Materials (Jonetta)	12	11DEC06	03JAN07



Start Date	29AUG05
Finish Date	26JUL07
Data Date	05SEP05
Run Date	08NOV06 07:10

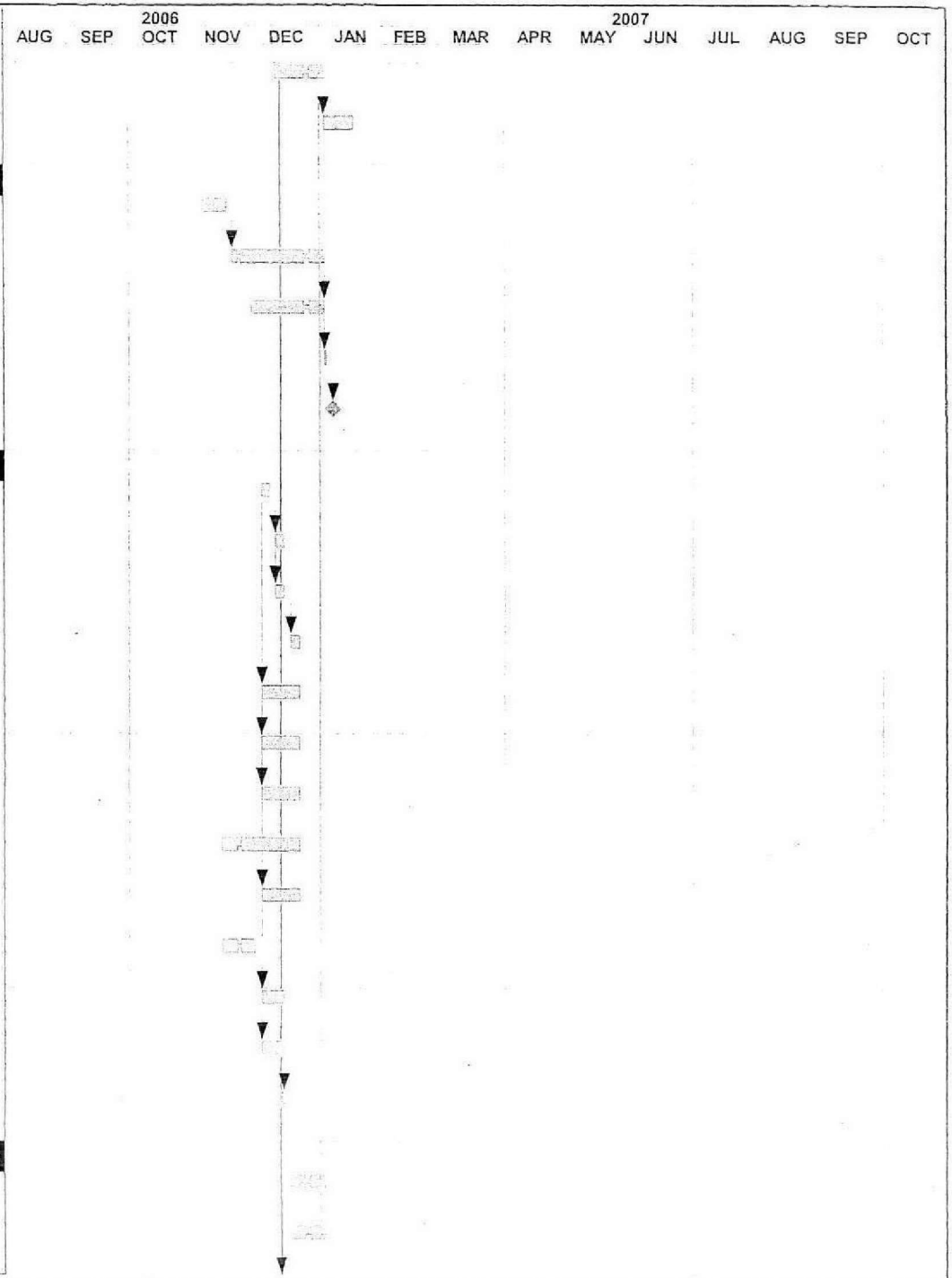
Early Bar
Progress Bar
Critical Activity

R1C3

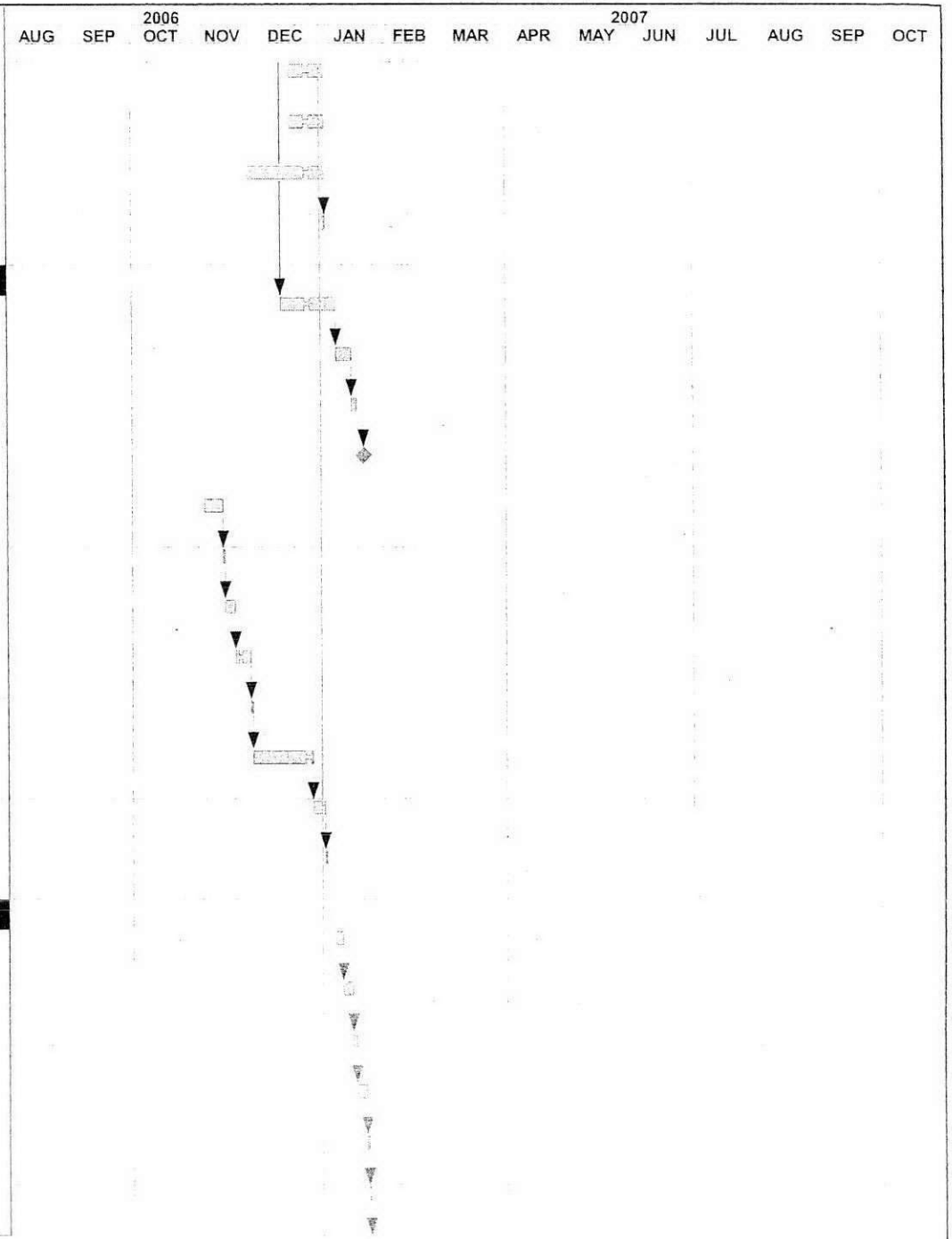
WCH

116-C-3 Remediation

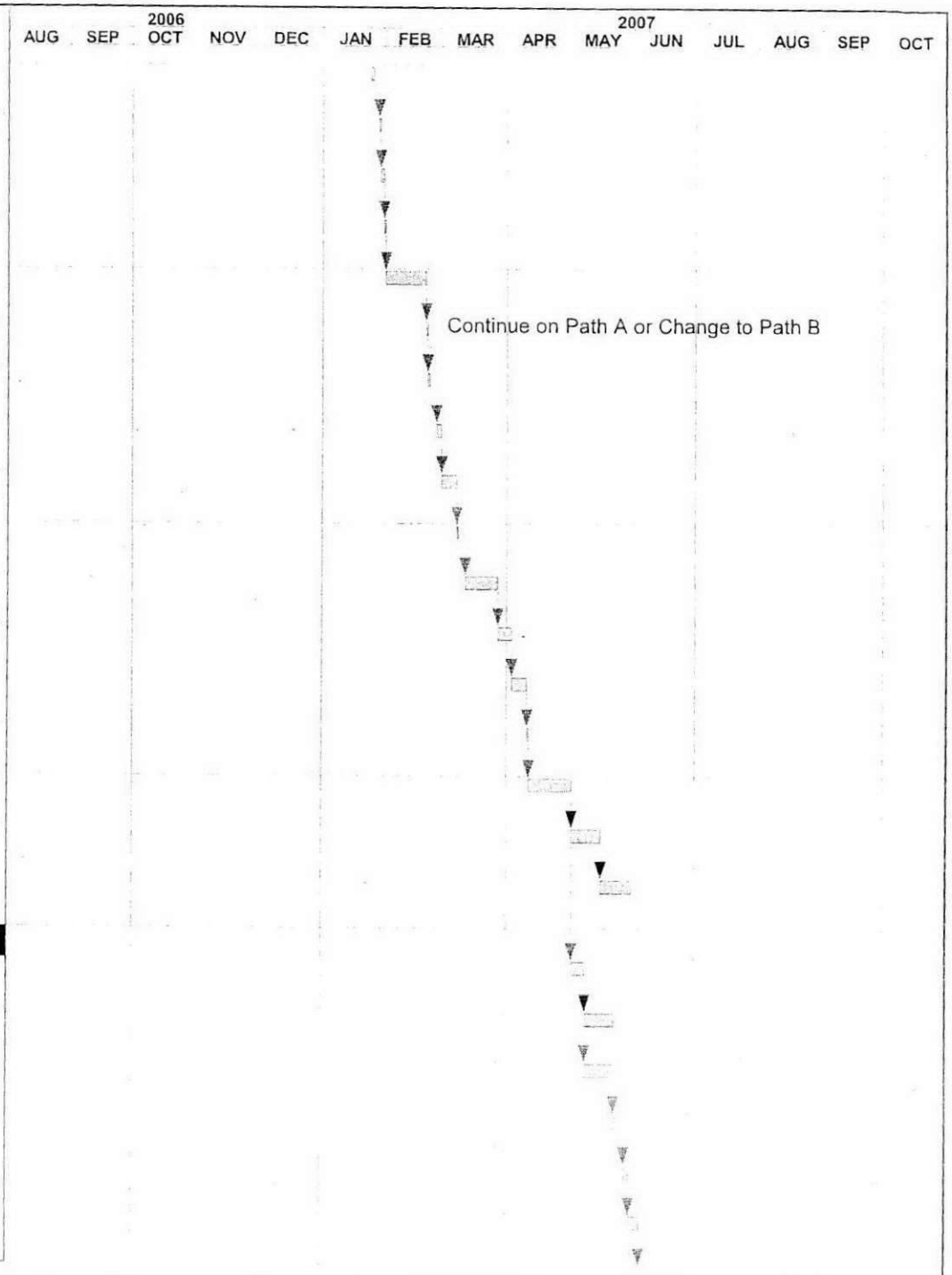
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish
10190	Revise Plans (Exc, Transp, HASP, etc) (Jonetta)	12	11DEC06	03JAN07
10200	Review and Approve Submittals (Jonetta)	8	04JAN07	17JAN07
Project Startup Review				
10210	Prepare PSR Plan/Checklist (Decker)	8	06NOV06*	16NOV06
10220	Reviewers Conduct Reviews (Decker)	22	20NOV06	03JAN07
10230	Document Reviews (Decker)	18	29NOV06	03JAN07
10240	Conduct Review Mtg/Post Startup Items (Decker)	1	04JAN07	04JAN07
10250	Director Authorize Work To Proceed (Donahoe)	0	08JAN07	
Prepare and/or Revise & Issue Doc's				
10260	Survey Req'mts Tech Assessment (Jonetta)	4	04DEC06*	07DEC06
10270	ERSTI (Jonetta)	4	11DEC06	14DEC06
10280	ALARA Review (Jonetta)	4	11DEC06	14DEC06
10290	RWP (Jonetta)	4	18DEC06	21DEC06
10300	JHA (Jonetta)	12	04DEC06	21DEC06
10310	Excavation Permit (Jonetta)	12	04DEC06	21DEC06
10320	SSWMI (Jonetta)	12	04DEC06	21DEC06
10330	OMP (Jonetta)	20	15NOV06*	21DEC06
10340	SSI/AB Compliance (Jonetta)	12	04DEC06	21DEC06
10350	Engineering Crosswalk (Jonetta)	8	15NOV06*	30NOV06
10360	Waste Profile (Jonetta)	8	04DEC06	14DEC06
10370	SAF (Jonetta)	8	04DEC06	14DEC06
10380	Other Doc's (Jonetta)	2	13DEC06	14DEC06
Conduct Training				
10390	IHE/OMP (Tina)	8	18DEC06*	03JAN07
10400	RWP (Jonetta)	8	18DEC06*	03JAN07



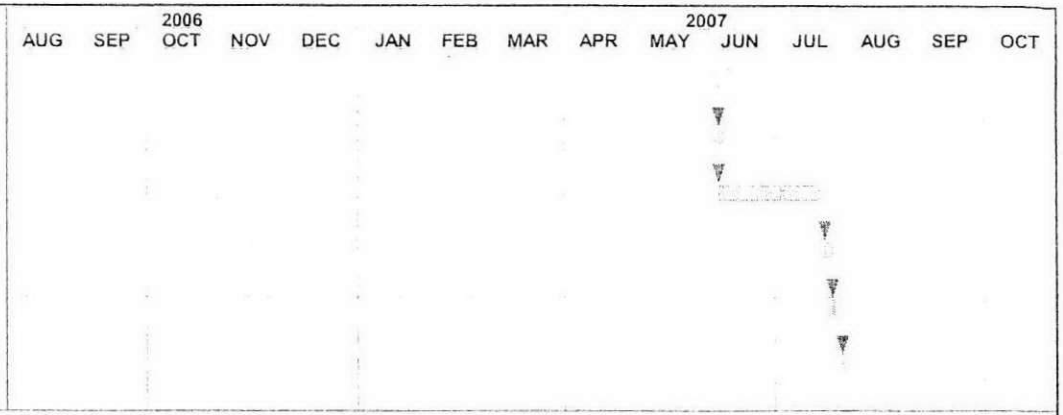
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish
10410	JHA (Jonetta)	8	18DEC06*	03JAN07
10420	Other Site Specific Training (Jonetta)	8	18DEC06*	03JAN07
10430	Perform other Readiness Activities (Jonetta)	20	27NOV06*	03JAN07
10440	Work Package Walkdown (Jonetta)	2	02JAN07	03JAN07
Prepare Sample Plans				
10442	Prepare Treated Waste Sample Plan Draft (Lorna)	12	13DEC06	08JAN07
10444	Review Waste Sample Plan Draft (Lorna)	4	09JAN07	15JAN07
10446	Inc. Comments on Waste Sample Plan Draft (Lorna)	3	16JAN07	18JAN07
10448	Issue Treated Waste Sample Plan (Lorna)	0	22JAN07	
10450	Prepare Work Instructions (Lorna)	6	06NOV06*	14NOV06
10460	Format/Edit (Lorna)	1	15NOV06	15NOV06
10470	Internal Review (Lorna)	2	16NOV06	20NOV06
10480	Inc. Comments (Lorna)	2	21NOV06	27NOV06
10490	Finalize and Issue (Lorna)	1	28NOV06	28NOV06
10500	RL/Reg Review (Lorna)	15	29NOV06	27DEC06
10510	Inc. Comments (Lorna)	2	28DEC06	02JAN07
10520	RL/Reg Approve (Lorna)	1	03JAN07	03JAN07
Field Remediation				
10530	Expose Tanks (Jonetta)	3	08JAN07*	10JAN07
10540	Construct Scaffolding (Jonetta)	2	11JAN07	15JAN07
10550	Cut Holes in Tanks (Jonetta)	2	16JAN07	17JAN07
10560	Insert Mixers & Hoses (Jonetta)	2	18JAN07	22JAN07
10570	Install Screen (Jonetta)	1	23JAN07	23JAN07
10580	Mix Dry Materials (Jonetta)	1	24JAN07	24JAN07



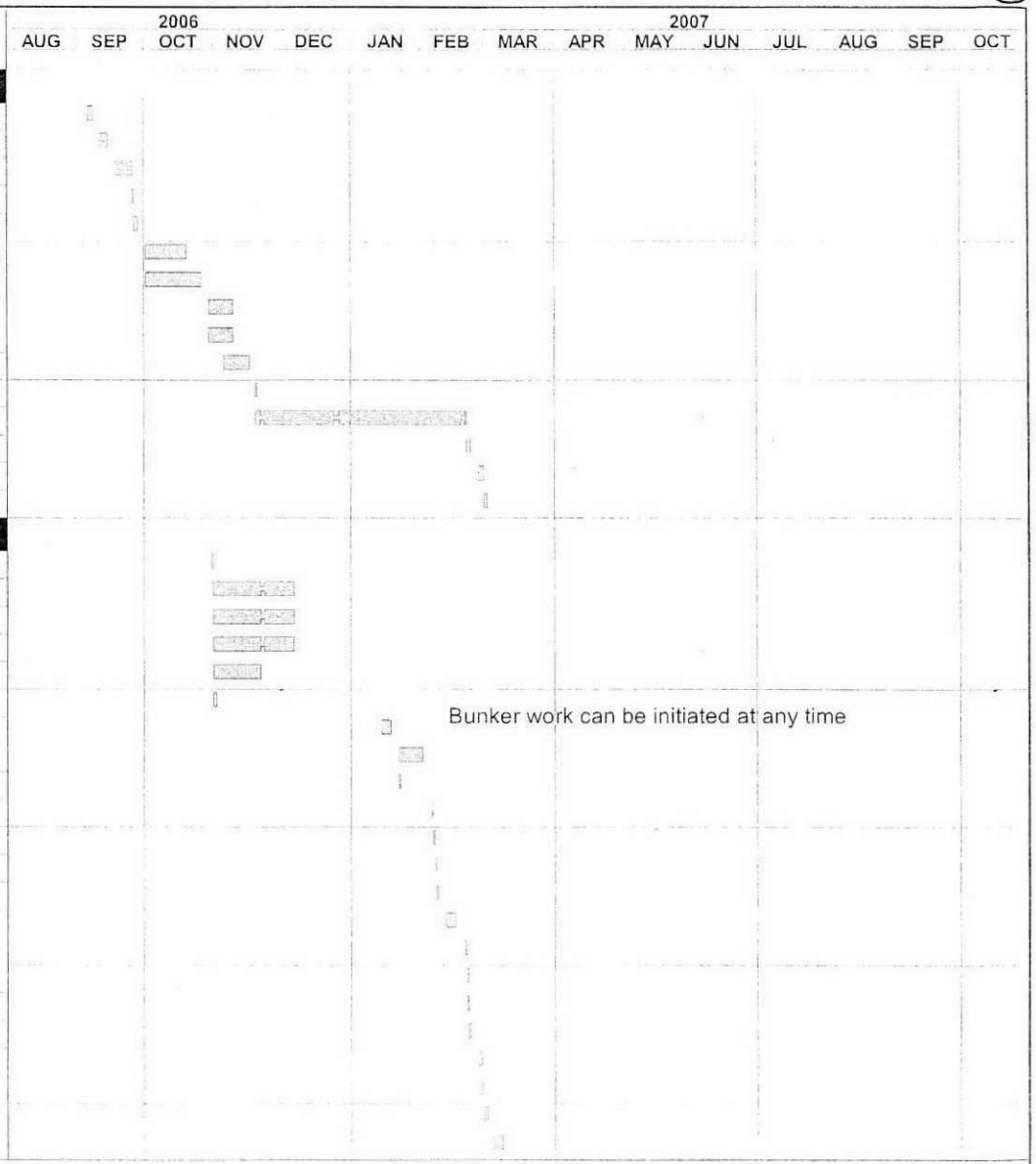
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish
10590	Add Sulfuric Acid (Jonetta)	1	25JAN07	25JAN07
10600	Add Ferrous Sulfate (Jonetta)	1	29JAN07	29JAN07
10610	Mix Liquid (Jonetta)	1	30JAN07	30JAN07
10612	Collect Sample of Mixed Liq'd (Jonetta)	1	31JAN07	31JAN07
10614	Laboratory Analysis (Lorna)	10	01FEB07	20FEB07
10616	Review Results/Cont. Path or Change to "B"(Dean)	1	21FEB07	21FEB07
10620	Add Dry Materials to Tank (Jonetta)	1	22FEB07	22FEB07
10630	Setup/Cure (Jonetta)	3	26FEB07	28FEB07
10640	Shear Tank (Jonetta)	4	01MAR07	07MAR07
10650	Collect Treated Waste Samples (Jonetta)	1	08MAR07	08MAR07
10660	Laboratory Analysis TCLP (Jonetta)	10	12MAR07	27MAR07
10670	Rubbelize Material (Jonetta)	4	28MAR07	03APR07
10680	Loadout (Jonetta)	4	04APR07	10APR07
10690	Collect Verification Samples (Jonetta)	1	11APR07	11APR07
10700	Laboratory Analysis (Lorna)	12	12APR07	02MAY07
10710	Prep Backfill Concurrence & Reg Approve (Lorna)	8	03MAY07	16MAY07
10720	Backfill (Jonetta)	8	17MAY07	31MAY07
RSVP				
10730	Data Review (Lorna)	4	03MAY07	09MAY07
10740	Prepare Data Calcs/DQA (Lorna)	8	10MAY07	23MAY07
10750	Prepare Internal Draft (Lorna)	8	10MAY07	23MAY07
10760	Technical Edit (Lorna)	1	24MAY07	24MAY07
10770	Internal Review (Lorna)	2	29MAY07	30MAY07
10780	Incorp. Comments (Lorna)	2	31MAY07	04JUN07



Activity ID	Activity Description	Orig Dur	Early Start	Early Finish
10790	Prepare Draft & Submittal (Lorna)	2	05JUN07	06JUN07
10800	Submit Draft A to RL/EPA (Lorna)	0	07JUN07	
10810	RL/EPA Review (Lorna)	24	07JUN07	19JUL07
10820	Inc. Comments (Lorna)	3	23JUL07	25JUL07
10830	RL/EPA Sign (Lorna)	1	26JUL07	26JUL07
10840	Issue RSVP (Lorna)	0	30JUL07	



Activity ID	Activity Description	Orig Dur	Early Start	Early Finish
PAS-1 Cask SARP				
1000	Contract Details	2	06SEP06*	07SEP06
1100	Derive Bounding Source Term	4	11SEP06	14SEP06
1200	Develop Approach	5	18SEP06	25SEP06
1300	Meet with Greg Borden	1	26SEP06	26SEP06
1400	Meet with Richard Self (DOE)	1	27SEP06	27SEP06
1500	Modeling	12	02OCT06*	19OCT06
1610	Text Changes (USQt, and SARP)	16	02OCT06*	26OCT06
1620	WCH Review	8	30OCT06	09NOV06
1630	Fluor Hanford Review	8	30OCT06*	09NOV06
1640	Incorporate Comments	8	06NOV06*	16NOV06
1650	Issue to DOE	1	20NOV06	20NOV06
1660	DOE Review	48	20NOV06*	20FEB07
1670	DOE Issues SER	2	21FEB07	22FEB07
1680	Accept Redlines, Tech Edit	3	26FEB07	28FEB07
1690	Issue Rev. 1	1	01MAR07	01MAR07
Characterize and Ship				
1810	Charaterization Kick-Off	1	31OCT06*	31OCT06
1760	Cogima Involvement	19	01NOV06	06DEC06
1770	Reserve Flat Bed	19	01NOV06	06DEC06
1780	Prepare Shipping Papers	19	01NOV06	06DEC06
1820	IWCP	12	01NOV06	21NOV06
1830	Safeguards and Security	1	01NOV06	01NOV06
1750	Fence and Bunker Work	4	15JAN07*	18JAN07
1700	Mockups	8	22JAN07	01FEB07
1740	Notify Fluor	1	22JAN07	22JAN07
1710	B Characterization Setup	1	05FEB07	05FEB07
1870	Characterization at B	1	06FEB07	06FEB07
1880	C Characterization Setup	1	07FEB07	07FEB07
1890	Characterization at C	1	08FEB07	08FEB07
1860	Summary Report	4	12FEB07	15FEB07
1720	Load "Fry Basket # 1"	1	20FEB07	20FEB07
1730	Load "Fry Basket # 2"	1	21FEB07	21FEB07
1840	Package # 1 into sludge container	1	21FEB07	21FEB07
1900	Load and Tiedown #1	1	22FEB07	22FEB07
1790	Shipment # 1	2	26FEB07	27FEB07
1850	Package # 2 into sludge container	1	28FEB07	28FEB07
1910	Load and Tiedown #2	1	01MAR07	01MAR07
1800	Shipment # 2	4	05MAR07	08MAR07



Start Date	29AUG05
Finish Date	08MAR07
Data Date	29AUG05
Run Date	08NOV06 15:04

Early Bar
Progress Bar
Critical Activity

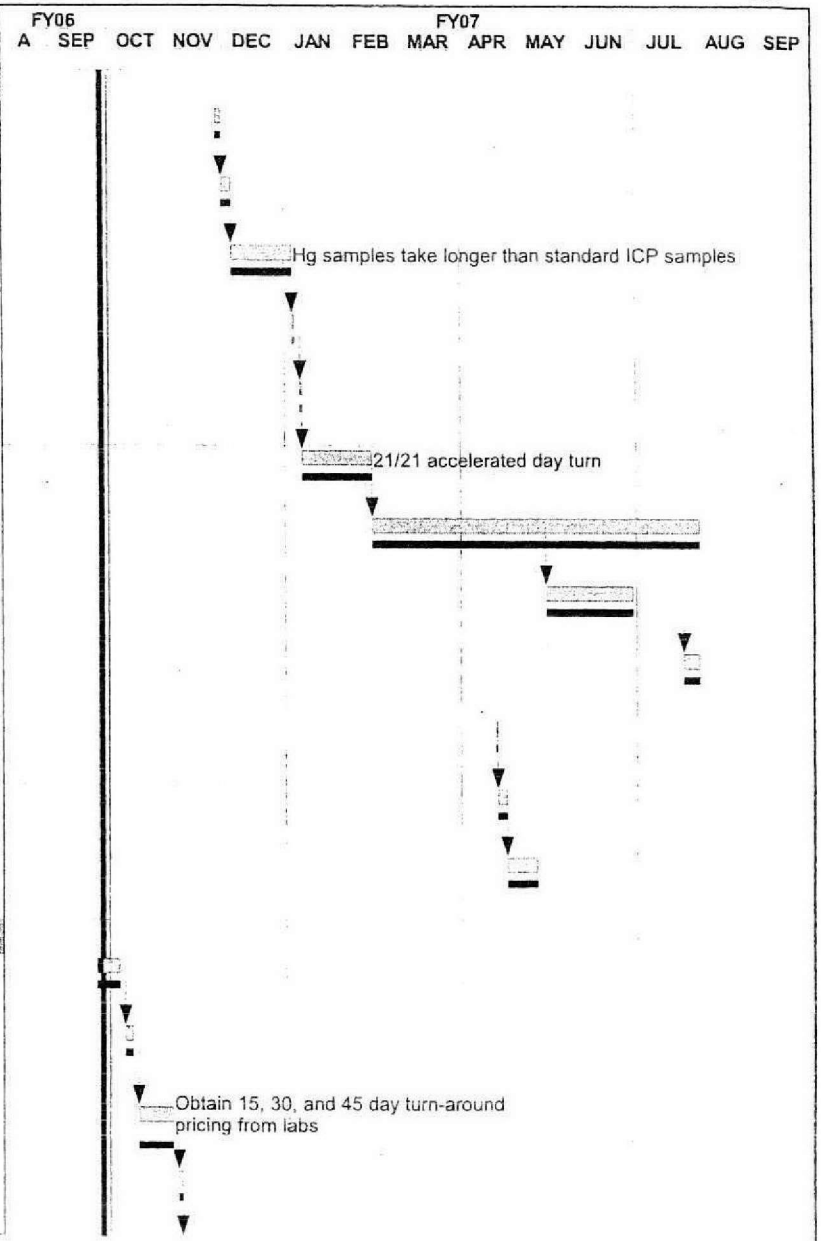
SNFT

Sheet 1 of 1

WCH

Spent Nuclear Fuel Transfer

Activity ID	Activity Description	% Comp	Orig Dur	Rem Dur	Early Start	Early Finish
FIELD REMEMDIATION						
BMS1000	Excavation	0	3	3	27NOV06*	29NOV06
BMS1100	LARADS	0	2	2	30NOV06*	04DEC06
BMS1200	Focus Sample	0	15	15	05DEC06*	03JAN07
BMS1300	Staking	0	1	1	04JAN07*	04JAN07
BMS1400	Closeout Sampling	0	1	1	08JAN07*	08JAN07
BMS1500	Lab	0	21	21	09JAN07*	13FEB07
BMS1600	Prepare Closure Document	0	93	93	14FEB07*	31JUL07
BMS1700	RL/Reg Review Draft A Closure Doc.	0	26	26	15MAY07*	28JUN07
BMS1800	RL/Reg Sign Rev. 0 Closure Doc.	0	5	5	24JUL07*	31JUL07
BMS1900	Backfill Concurrence	0	1	1	18APR07*	18APR07
BMS2000	Mobilization	0	2	2	19APR07*	23APR07
BMS2100	Backfill	0	10	10	24APR07*	09MAY07
WASTE OPERATIONS						
BMS001	Stoller Develop Testing Plan	25	8	6	25SEP06A	05OCT06
BMS011	WCH Review Lab Testing Plan	0	4	4	09OCT06	12OCT06
BMS021	Stoller Identify Lab	0	12	12	16OCT06	02NOV06
BMS041	WCH Issue Change Notice	0	2	2	06NOV06	07NOV06



Start Date 29AUG05
Finish Date 20FEB07
Data Date 27SEP06
Run Date 04OCT06 10:37

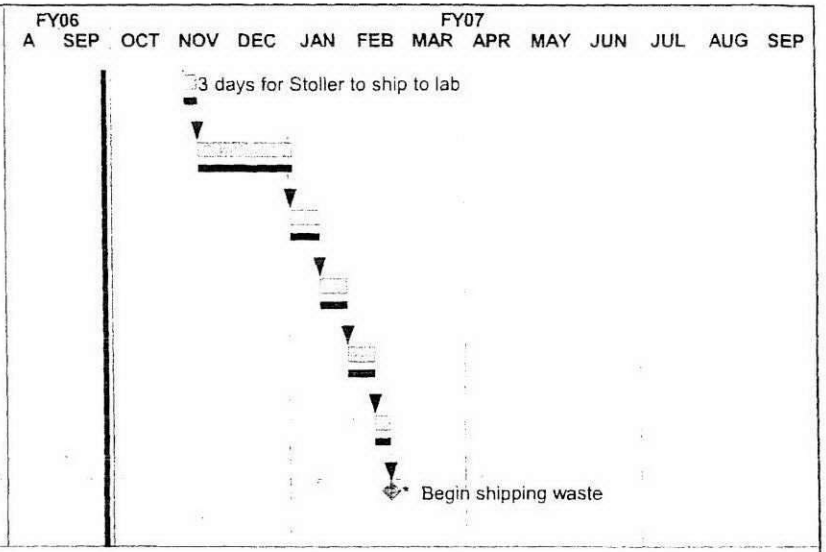
Early Bar
Target Bar
Progress Bar
Critical Activity

BMER

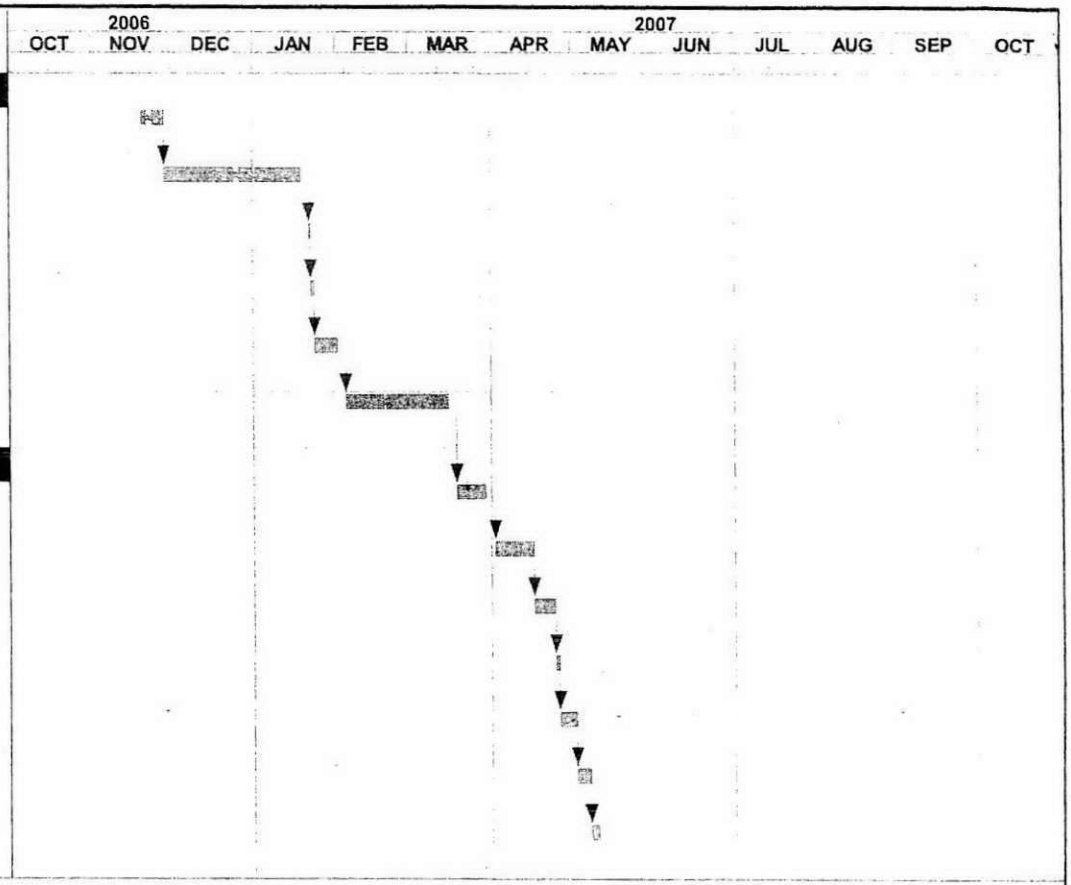
Washington Closure Hanford

B Mercury Soils

Activity ID	Activity Description	% Comp	Orig Dur	Rem Dur	Early Start	Early Finish
BMS045	FR Provide Test Samples	0	4	4	08NOV06	14NOV06
BMS055	Stoller Perform Treatability Test	0	30	30	15NOV06	02JAN07
BMS065	Stoller Develop Treatment Plan	0	8	8	02JAN07	15JAN07
BMS075	WCH Review/Resolve Comments w/ Stoller	0	8	8	16JAN07	29JAN07
BMS085	Regulator Review	0	8	8	30JAN07	12FEB07
BMS095	Resolve Regulator Comments	0	4	4	13FEB07	20FEB07
BMS105	Regulator Approval	0	0	0		20FEB07



Activity ID	Activity Description	Orig Dur	Early Start	Early Finish
Local Material				
1000	Backfill 118-C-1	4	20NOV06*	28NOV06
1100	Backfill 100-B-14	27	29NOV06	18JAN07
1200	Backfill 128-B-3	1	22JAN07	22JAN07
1300	Backfill 118-B-6	1	23JAN07	23JAN07
1400	Backfill 100-C-9	6	24JAN07	01FEB07
1500	Backfill 118-B-1	23	05FEB07	15MAR07
Pit 24 Material				
1610	Backfill 118-C-1	8	19MAR07	29MAR07
1620	Backfill 100-B-14	9	02APR07	16APR07
1630	Backfill 128-B-3	5	17APR07	24APR07
1640	Backfill 118-B-6	1	25APR07	25APR07
1650	Backfill 100-C-9	4	26APR07	02MAY07
1660	Backfill 118-B-1	2	03MAY07	07MAY07
1670	Backfill 116-C-3	3	08MAY07	10MAY07



Start Date	29AUG05
Finish Date	10MAY07
Data Date	29AUG05
Run Date	05OCT06 12:14

Early Bar
Progress Bar
Critical Activity

BKFL

Sheet 1 of 1

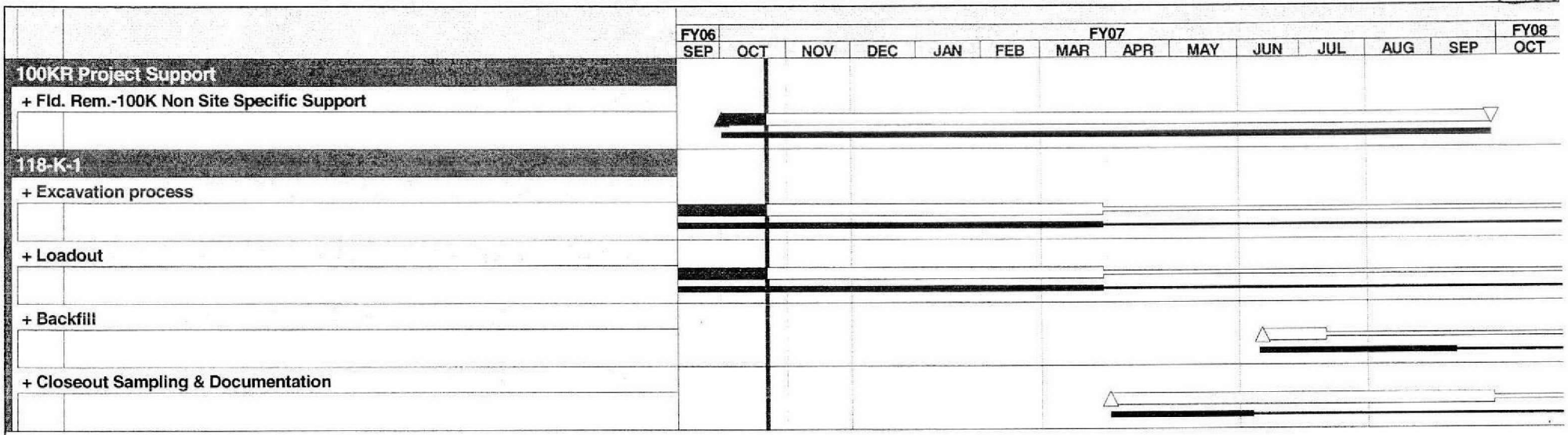
BECHTEL HANFORD INC.

FY06/07-REV A DWP SHELL

LT-S1 P3 Verification - Codes/Escalated Cost

Attachment 7

(4



Start Date	29AUG05
Finish Date	30SEP09
Data Date	23OCT06
Run Date	01NOV06 15:06

Early Bar
TARGET
Progress Bar
Critical Activity

FKC7 Sheet 1 of 1

WASHINGTON CLOSURE HANFORD

100KR Field Remediation

FY07

Attachment 8

Donnelly, Jack W

From: Fancher, Jonathan D (Jon)
Sent: Thursday, November 09, 2006 6:59 AM
To: Donnelly, Jack W
Subject: Update for UMM

Jack
Please provide the following update at UMM

- Work continues removing liquid from 100-D-56 pipes
- The next phase of work is planned to be removal of overburden/liquid/pipes from the northern segment of 100-D-56
- New subcontractor SEC is mobilizing equipment, personnel and trailers to 100D.

Jon Fancher ☺
100D Field Remediation Closure FRM
☎(509) 373-**3127**/ (509) 531-0700
page 373-PAGE, 7345
jon.fancher@wch-rcc.com

Donnelly, Jack W

From: Price, John [Jpri461@ECY.WA.GOV]
Sent: Thursday, November 09, 2006 11:44 AM
To: Donnelly, Jack W
Cc: Golden, James W; Laws, Gail L (DOH); Fancher, Jonathan D (Jon); Jones, Mandy (ECY)
Subject: RE: Upwind Air Monitor for 100-D/DR Area Remaining Sites and Burial Ground Remedial Action

Let's document approval in today's Unit Manager Meeting minutes. Thanks.

"Ecology agrees that yhe upwind air monitor for 100-D/DR Area Remaining Sites and Burial Ground Remedial Action can be on the same side of the road as the building that supplies the power. However, WCH must verify that this dog house is located at least two "building heights" away to reduce the air turbulence interference caused by the building."

From: Donnelly, Jack W [mailto:jack.donnelly@wch-rcc.com]
Sent: Thursday, November 09, 2006 11:18 AM
To: Laws, Gail L (DOH); Price, John; Fancher, Jonathan D (Jon); Jones, Mandy (ECY)
Cc: Donnelly, Jack W; Golden, James W
Subject: RE: Upwind Air Monitor for 100-D/DR Area Remaining Sites and Burial Ground Remedial Action

Good morning Gail:

Does this email serve as the DOH/Ecology approval for this slight deviation in the air monitor location. Just wanted to make sure.

From: Laws, Gail L (DOH) [mailto:Gail.Laws@DOH.WA.GOV]
Sent: Thursday, November 02, 2006 3:35 PM
To: Price, John; Fancher, Jonathan D (Jon); Jones, Mandy (ECY)
Cc: Donnelly, Jack W; 'Brad Marshall'; jrlaws@wch-rcc.com; Danielson, Al (DOH); Fordham, Earl W (DOH)
Subject: Upwind Air Monitor for 100-D/DR Area Remaining Sites and Burial Ground Remedial Action

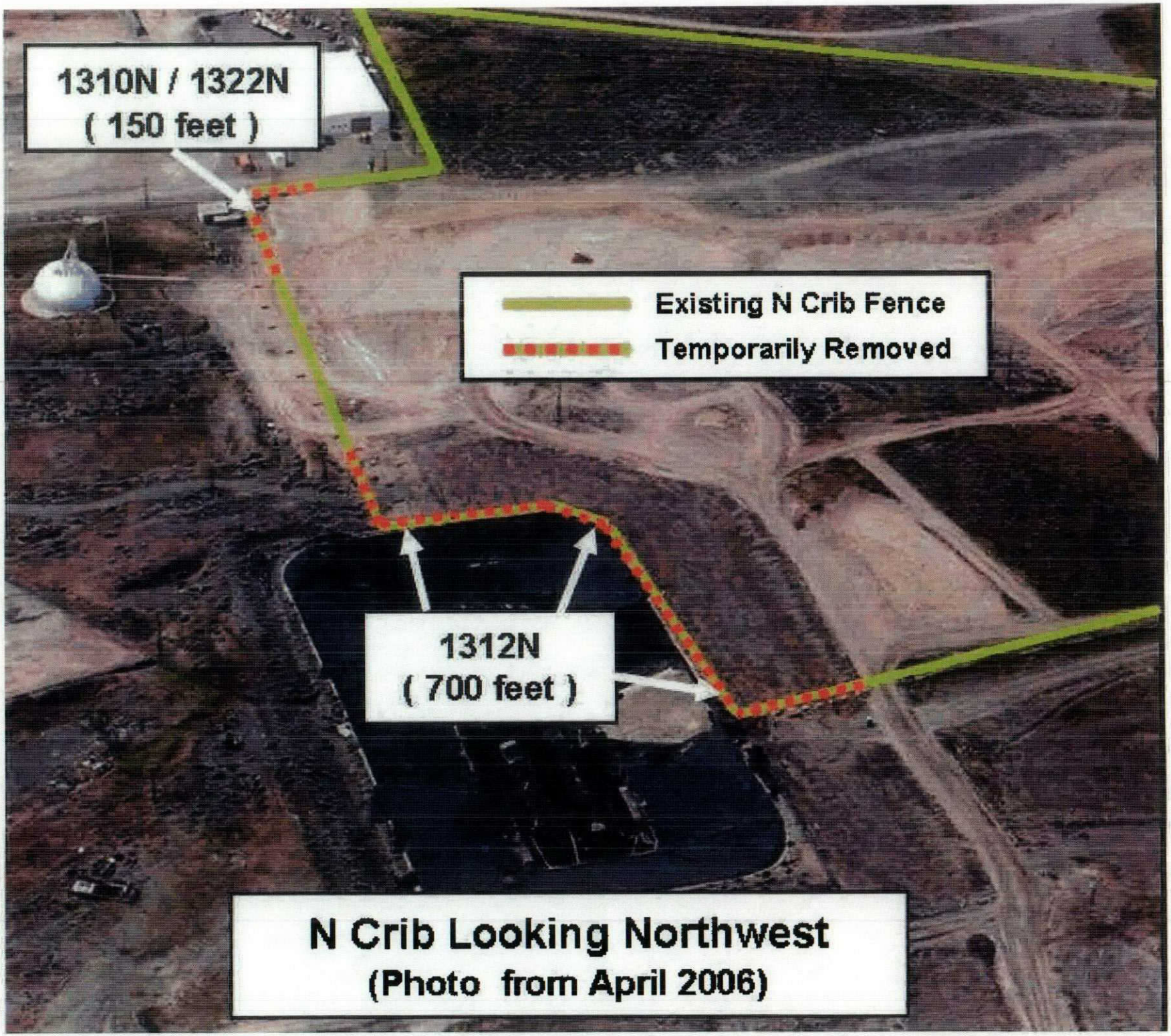
Hi John, John,& Mandy, 11/2/06 ~3:30pm

The upwind air monitor for 100-D/DR Area Remaining Sites and Burial Ground Remedial Action can be on the same side of the road as the building that supplies the power. However, make sure that this dog house is located at least two "building heights" away to reduce the air turbulence interference caused by the building.

Do not hesitate to contact me if you have any questions or concerns!
Thank you!

Gail Laws
Radiation Health Physicist
eMail: gail.laws@doh.wa.gov
Phone: 509/946-0712
FAX: 509/946-0876

Attachment 9


1310N / 1322N
(150 feet)
Existing N Crib Fence
Temporarily Removed
1312N
(700 feet)
N Crib Looking Northwest
(Photo from April 2006)

	116-N-1 Propsosed Changes from 116-N-3 Approved Plan	2005 Approved 116-N-3	Plan
Planting Window	Mid November through December	Mid November through early January	September through November
Seeding Technique		Broadcast seed	Drill seed - Drives cost up as subcontractor will generally build in cost for significant equipment repairs/replacement.
Fertilizer		120 lbs Triple 16 at time of seeding	No fertilizer specified at this time - however clause "if deemed advisable based on other 100 area work Triple 16 at 120 lb/ac"
Seed Mix	Increase Bluebunch wheatgrass to 10 lbs/ac while eliminating Thickspike Wheatgrass, as germination and establishment of Thickspike wheatgreass on other sites has been poor. Add 3 lbs/ac bottlebrush squireltail seed, as use of bottlebrush squireltail straw mulch (with subsequent residual seed within) on other 100 Area waste sites indicates successful germination and survival.	Thickspike Wheatgrass 5lbs/ac Bluebunch Wheatgrass 5lbs/ac Indian ricegrass 5 lbs/ac Prarie Junegrass 5 lbs/ac Sandberg's bluegrass 10 lbs/ac needle and thread 1 lbs/ac rabbitbrush and other Hanford Site forbs as available from hand collections. Purchased from a local seed producer and use of seed in storage previously grown under contract for the ERC.	Revegetation Manual Seeding Rates Indian ricegrass 2 lbs/ac Sandberg's bluegrass 2lbs/ac needle and thread 0.5lbs/ac Hand collected sagebrush, yarrow, balsamroot, pine bluegrass, and snow buckwheat
Ployacrylamide tackifier	15 lbs ac, to facilitate seed germination		
Irrigation	2500 gal/ac at time of seeding plus 2500 gal/ac after the shrubs are planted, if needed	1/5 inch of water per acre (5,000 gal/ac) for seed germination	5 gal of water per sagebrush plant immedietly after installation
Mulch		2 tons/ac grass straw and crimped with serrated disk	2 tons/ac straw
Sagebrush	400 sagebrush plants per acre	~340 sagebrush plants per acre.	775 plants per acre. Poor soil properties will not support this density as this would produce smaller stature shrubs yielding lower quality habitat.
Monitioring for Success		5 years	5 years

Attachment 10

Donnelly, Jack W

From: Darby, John W (300 Area TL)
Sent: Thursday, November 09, 2006 12:48 PM
To: Donnelly, Jack W
Subject: 300 FR status

Lorna Dittmer will address backfill concurrence for 618-2

- If and when concurrence is received, we are prepared to commence backfilling of 618-2 & -3 the week of Nov. 20.
- Mobilization for the West Side Remediation (starting with 618-7) is proceeding. Activities primarily involve review of submittals from TerranearPMC.
- The grouted drum containing the Cs pig was shipped to ERDF for disposal.
- The drum containing the non-PCB contaminated oils and the container (250-gal tote) of mixed oil waste were shipped for disposal.

Attachment 11

ACT	TITLE	ES	E EF	El
19202350	DOE Review Draft Long Term Stewardship Plan	12/6/2006	1/31/2007	
1D001925	RL/Regulator Review 100-D Summary Report	1/24/2007	3/7/2007	
19202475	Regulator Review Draft LongTerm Stewardship Plan	3/20/2007	5/9/2007	
C0005450	Tri-Party/Stkhldr Review of Draft A 100/300 Area Risk Asses	8/9/2007	9/20/2007	
13200625	Concurrent Review of Draft A CSM - Inter Areas	8/13/2007	8/20/2007	

Attachment 12

(7) 10

300 Area D4 Status
November 9, 2006
100/300 Area Combined Unit Manager Meeting

Characterization/ Hazardous Material Removal

- **306E/306W** –Demolition is slated to begin the week of 11/13/06.
- **3731/3731A** – Hazardous material removal is completed.
- **3707-H** – Hazardous material removal is completed.
- **3706** – Hazardous material removal is ongoing.
- **3720** –Hazardous material removal is ongoing.
- **3718E** – Hazardous material removal is ongoing.
- **324** – Hazardous material removal is ongoing
- **327** – Hazardous material removal is ongoing

Ongoing Demolition Activities

- **305**
- **333**

60-Day Project Look Ahead

- Begin demolition of 306E, 306W, 3731, 3731A, 3707-H, and 3718E.
- DOE and EPA approval of Action Memorandum #3
- Receive/address DOE and EPA comments on revision to RAWP #1 (consolidated scope from Action Memo #1 and #3). Comments are due by December 1, 2006

Attachment 13

Disposition of Fluorescent Lamps and PCB Ballasts for 300 Area Facility Demolition

Background:
DOE/RL-2004-77, Removal Action Work Plan #1 for 300 Area Facilities (RAWP), identifies the Centralized Consolidated Recycling Center (CCRC) as the appropriate management location for recyclable wastes such as fluorescent lamps and PCB ballasts. These wastes must be certified as free of radioactive and beryllium contamination for the CCRC to accept them. The disposal path for contaminated fluorescent lamps and PCB ballasts is not specifically identified in the RAWP. Currently, fluorescent tubes and PCB ballasts are removed during the deactivation process and separated into contaminated and non-contaminated waste streams. Those that meet CCRC requirements are shipped for recycle. Those that do not meet the requirements are staged pending treatment or disposal.

Older fluorescent lamps typically have 30 and 50 mg Hg per lamp. As a worst case example of mercury concentrations in a building demolition, empirical observations of the 324 office and admin areas yield ratio of 0.08 lamps per square foot. The actual count of lamps in the 327 building yields a ratio of 0.03 lamps per square foot. A commercial lighting program, Visual™, estimates between 0.08 and 0.1 lamps per square foot. Assuming 50 mg Hg per lamp, 0.1 lamps per square foot, 100 pounds per square foot for demolition debris, and a 50,000 square foot facility, the mercury contribution to the waste matrix would be 0.11 ppm. The concentration is very conservative because modern fluorescent lamps contain only 10 to 15 mg Hg per lamp. With a lifetime of about 25,000 hours, it is expected that most fluorescent tubes contain only 10 to 15 mg Hg since they would have been replaced in the last 5 to 8 years. The use of 100 pounds per square foot is based on small light steel and wood structures. Buildings with heavy concrete and structural steel tend to be in the 150 to 200 lbs per square foot range. Additionally, older facilities use fewer lamps. This logic also applies to high/low pressure mercury and sodium lamps. While their mercury content is higher (25 to 75 mg Hg), fewer (much fewer) lamps are used per square foot due to their greater illumination.

Agreement:
PCB ballasts meet the ERDF Waste Acceptance Criteria for disposal when they are part of an approved waste profile. For buildings slated and profiled for disposal at ERDF, it is acceptable to leave the PCB ballasts in place for disposal during building demolition. For buildings slated for disposal at a location other than ERDF, PCB ballasts will be either left in place or removed based on the acceptance criteria of the receiving facility. PCB ballasts removed and segregated during deactivation, for any reason, will continue to be evaluated for recycle or disposal.

Fluorescent tubes and other mercury containing lamps (i.e. high/low pressure mercury and sodium lamps) that are certified free of radioactive and beryllium contamination can be sent to the CCRC for recycle. Mercury containing lamps removed from non-contaminated areas will continue to be recycled. Mercury containing lamps (primarily fluorescent tubes) located in radioactive or beryllium contaminated areas will be left in place during building demolition based on their small contribution to the waste matrix.